THE WORLD OF
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2008

AUERSWALD

ENGLISH
VERSION

Auerswald®

Simply Clever PBX Systems

Auerswald®

Simply Clever PBX Systems

Made in Germany –
more than just a promotional gimmick?

Gerhard Auerswald
General Manager

Dear customers,

I am glad that you are interested in our products and are reading this message in our new catalogue. Here you will find our established and familiar range and, of course, plenty of new additions – all products of the highest quality, developed, produced and marketed by us here in Cremlingen.

What does it mean when we market our products as "Made in Germany"?

It is more than just a formal statement that they come from a production facility in Germany and not, for instance, from the Far East. What we especially mean is the way in which we produce them. Our efficient processes and ingenious design ideas help to keep production costs down, despite our relatively high wage overheads – an advantage that makes Auerswald products such good value. Compared with practices in the Far East, our use of resources throughout the production process follows entirely different standards – a sound investment in the environment. And we are keeping expertise and jobs at home – that may go against the current trend, but we believe it is far-sighted. We of course manufacture all products to our legendary Auerswald quality – for you to enjoy the benefits throughout the product lifetime.

Nevertheless, we also rely on suppliers from the Far East, since some electronic and mechanical components used in our products are only produced there. But here again, we eliminate all quality risks by sourcing only from certified suppliers and scrupulously applying German standards in the inspection of purchased goods. I can assure you that our products contain no contaminated plastics or hazardous components.

So don't take our "Made in Germany" label as just a nice promotional idea. It's there to let you know where you can find quality.

Best regards from Cremlingen, Germany

Gerhard Auerswald

Gerhard Auerswald

ISDN and VoIP PBX SYSTEMS

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www.auerswald.com

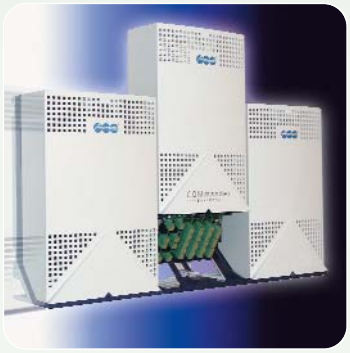
Master of communication

Sales and installation exclusively by certified dealers.

COMmander® Business

The base model comes “blank“. Only your needs determine the configuration of this professional system. It's an extremely flexible system, which you can upgrade with analog, digital, VoIP* and door ports, to a total of 120 extension ports. For connections with the public telephone network, you can set up ISDN basic rate interfaces, a PRI primary multiplex interface and VoIP trunk lines alike. The VoIP trunk lines can be extended to a maximum of 38 channels using COMmander VoIP modules*. And how is this for flexibility: COMmander Business lets you use either ISDN or IP* system telephones in 2-wire, 4-wire or LAN* versions, thus fitting in with almost any existing infrastructure.

The system becomes a part of your local network and with the use of a web browser the configuration or remote servicing is possible from anywhere in the world. You will no longer need to install specific applications on any PC, as the web interface includes a configuration interface and administration tools. These are automatically updated when you update the system software for the telephone system.

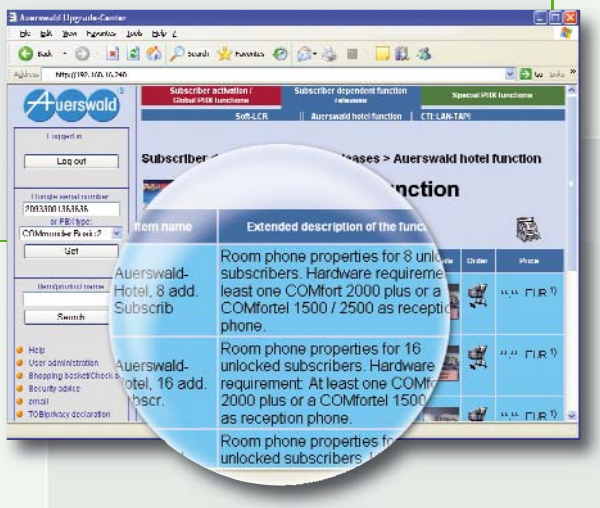


COMmander Business:
The basic version comes with a two-part housing with enough slots for nine modules. If required, the optional extension has room for six additional modules.

Online Upgrade Center for COMmander® Business / Business 19“

COMmander Business can even help you to save money: its upgrade options mean that you only pay for the functions you are using. An authorised specialist dealer can easily activate specific functions or additional extension ports via the Online Upgrade Center.

Any authorised dealer can also activate specific functions for a limited time only, so you can test them fully before deciding to upgrade.


Auerswald
Log out
Subscriber activation / Global VoIP functions
Subscriber dependent function
Special VoIP functions
Soft-LCR
Auerswald hotel function
CTI-LAN-TAPI
Subscriber
Auerswald hotel function
Item name
Extended description of the func
Room phone properties for 8 unl subscribers. Hardware requirem least one COMfort 2000 plus or a COMfortel 1500 / 2500 as recepti phone.
Auerswald- Hotel, 8 add. Subscrib
Room phone properties for 16 unlocked subscribers. Hardware requirement: At least one COMf 2000 plus or a COMfortel 1500 as reception phone.
Auerswald- otel, 16 add. bscr.
Room phone properties fo unlocked subscribers

You can find a complete list of card modules for COMmander Basic.2 and sample configurations on pages 6 and 7.

➡ *To view the whole range of functions and to compare the different systems, please refer to the back pages.*

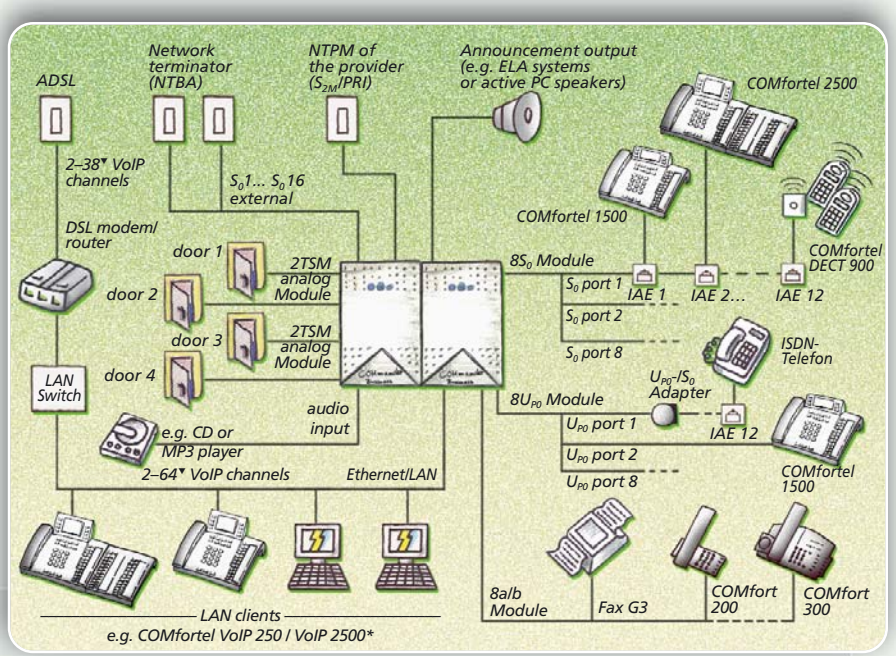
COMmander® Business 19“

To accommodate the latest IT developments, Auerswald also offers a 19" rack version of COMmander Business with stainless steel front, which allows integration with a structured cabling system (SCS). Basic setup, functionality and configuration possibilities are identical to the classic wall-mounted version.

COMmander Business 19“: The 19" rack version perfectly accommodates the latest IT environments. This image shows the version incl. a fully equipped COMmander Business 19“ Xtension.

- Full modular ICT system for ISDN and VoIP connections
- 38 external calls (ISDN and VoIP*) simultaneously, 2 VoIP call in the basic setup
- Full VoIP system integration, e.g. automatic routing, call distributions, trunk line authorisations, barred and permitted numbers 25
- Up to 120 extension ports
- System telephony via ISDN (S_0/U_{P0}) and IP*
- Group functions with smart ringing options (all, linear or incremental)
- Waiting Field for up to 38 calls 27, can be operated with the corded COMfortel system telephones
- Auto Attendant, 10 targets parallel and/or cascaded 27
- Hotel Function (e.g. check-in/check-out and printout of bills without a computer) 26
- Boss/Secretary function, flexible assignment of extensions
- CTI – computer-based telephony using LAN-TAPI 24

At home in the **IT world**



▼ COMmander VoIP Modules required

COMmander® Business / Business 19“

● **Basic configuration** ***Trunk line ports:*** 2 VoIP trunk lines (switchable to internal*), ***Extension ports:*** 2 VoIP channels* (switchable to external), ***PC ports:*** USB, Ethernet, V.24 printer port (print-out of call records), ***Miscellaneous:*** processor module, AC adapter for maximum configuration, 2-part housing unit

● **Maximum configuration** ***Trunk line ports:*** 16 S_0 ports or 1 PRI port with 4 S_0 ports, 38 VoIP channels* (switchable to internal), ***Extension ports:*** 56 S_0 ports, 72 U_{P0} ports, 64 analog ports, 64 VoIP channels* (38 thereof switchable to external), ***Door ports:*** 4 door ports (4 door openers, 16 bell ports), ***Miscellaneous:*** 3-part housing unit

● **Technical data** ***Power supply:*** earthed safety plug, 230 V +/-10 %, 50 Hz, max. 230 W, ***Trunk line ports:*** S_0 port(s) and PRI port, Euro ISDN (DSS-1), PTMP/PTP connection, VoIP channels (SIP acc. to RFC 3261), ***ISDN extension ports:*** S_0 and U_{P0} port(s), Euro ISDN (DSS-1), PTMP connection, ***Analog extension ports:*** CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), ***VoIP extensions*:*** SIP as per RFC 3261, ***Printer port:*** RS-232 C (V.24), 9600 baud, 8 n 1, ***PC/data port:*** USB, ***Ethernet port (LAN):*** 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***Housing:*** plastic, 6 (9**) parts with 2 (3**) wall-mountable housings, 2 (3**) module carriers, and 2 (3**) covers, ***Dimensions:*** 445 (667.5**) mm x 357 mm x 142 mm, ***Weight:*** approx. 4.6 kg (6.5**kg), without card modules

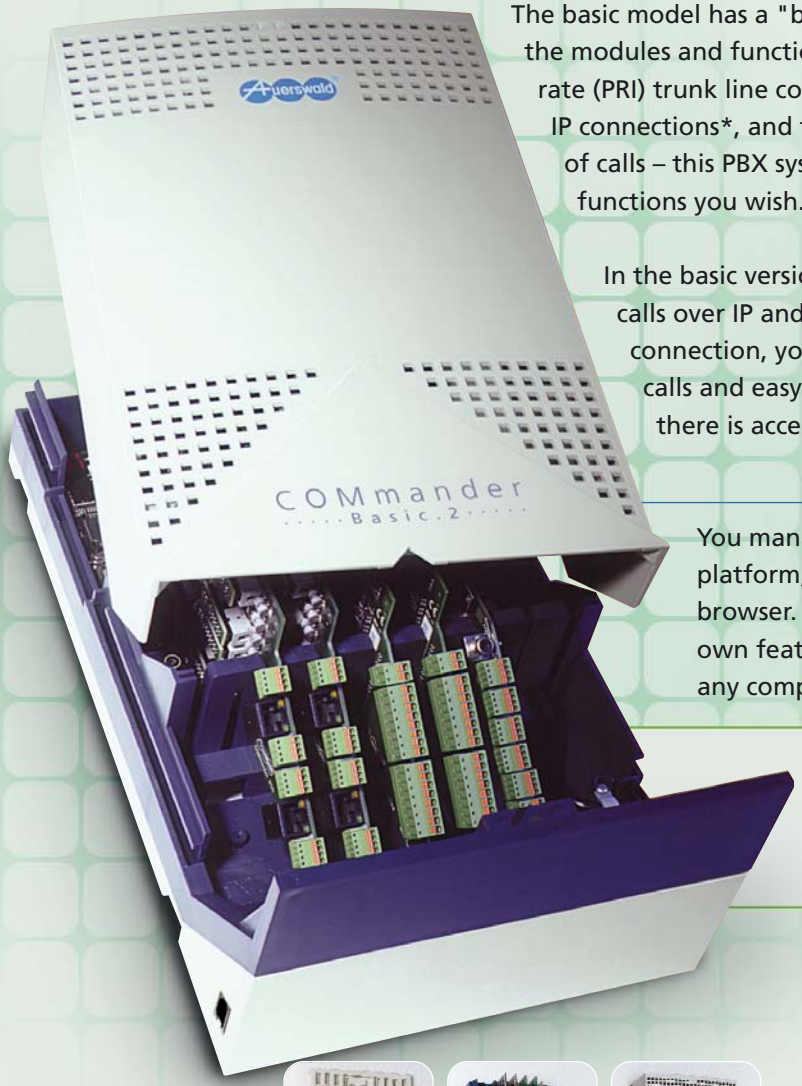
● **Technical data COMmander® Business 19“** like COMmander Business, but ***Housing:*** closed 19“ slide-in housing, 7 HU, stainless steel front, ***Dimensions:*** 483 mm x 265 mm x 495 mm, ***Installation depth:*** 540 mm from front plate (incl. cable installation in the back), ***Weight:*** approx. 14 kg (15.5**kg), without card modules

* will become available later by means of a software update and matching hardware, see also page 6 (COMmander modules) and page 17 (COMfortel VoIP 2500)

** The values in brackets refer to COMmander Business / Business 19“ with Xtension

Designed for growth, **built for the future**

If you're looking for a professional PBX system that provides up to 48 extension ports and IP telephony (VoIP), we've got the solution you need: COMmander Basic.2. It has all the features you'd expect from a state-of-the-art system.



The basic model has a "blank" configuration and can be equipped with precisely the modules and functions required to meet your individual needs. Primary rate (PRI) trunk line connections or system telephones with 2-wire, 4-wire or IP connections*, and functions such as LAN-TAPI or project related accounting of calls – this PBX system can be configured for whatever hardware or functions you wish.

In the basic version, the system's VoIP integration already allows two calls over IP and can be extended* for up to 24 calls. With this kind of connection, you benefit from low-cost internet telephony for external calls and easy addition of subscribers (plug-and-phone) wherever there is access to your computer network.

COMmander® Basic.2

You manage the system via its web interface. Whatever the platform, all you need is an operating system with a web browser. Different access levels allow users to configure their own features – not just from their local computer, but from any computer with internet access, using a web browser.

The option of integrating future technologies without delay protects your investment, thus offering excellent value for money in the long term.

The mounting of the system is pretty easy: chassis on the wall, put on the rack, equip with modules, cover on, finished.

These options for COMmander® Basic.2 / Basic.2 19" can be activated in the Upgrade Center:

- 64 additional internal numbers (up to 112), 48 included
- Soft LCR (extensions in increments of 8, up to 112), 16 included
- Call-Through connections (all lines), 4 simultaneous connections included
- Call records (in increments of 3000, up to 9000), 3000 in scope of supply
- LAN-TAPI (extensions in increments of 8, up to 112), package includes 4
- Project assignment of calls
- X.31 on internal S_0 port (X.25 in D channel)
- Hotel Function (in-room telephones in increments of 8)
- Auto Attendant (enhanced Announcement before Answering)

You can find an illustration of the Upgrade Center on page 2.

COMmander® Basic.2 / Basic.2 19“

● **Basic configuration** ***Trunk line ports:*** 2 VoIP channels (switchable to internal*), ***Extension ports:*** 2 VoIP channels* (switchable to external), ***PC ports:*** USB, Ethernet, V.24 printer port (print-out of call records), ***Miscellaneous:*** processor module, AC adapter for maximum configuration

● **Maximum configuration** ***Trunk line ports:*** 8 S_0 ports or 1 PRI port with 2 S_0 ports, ***Extension ports:*** 24 S_0 ports, 32 U_{P0} ports, 32 analog ports, 24 VoIP channels* (switchable to external), ***Door ports:*** 2 door ports (2 door openers, 8 bell ports)

● **Technical data** ***Power supply:*** earthed safety plug, 230 V +/-10 %, 50 Hz, max. 70 W, ***Exchange line ports:*** S_0 port(s) and PRI port, Euro ISDN (DSS-1), PTMP/PTP connection, VoIP channels (SIP acc. to RFC 3261), ***ISDN extension ports:*** S_0 and U_{P0} port(s), Euro ISDN (DSS-1), PTMP connection, range of U_{P0} up to 1000 m, ***Analog extension ports:*** CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), ***VoIP extensions*:*** SIP as per RFC 3261, ***Printer port:*** RS-232 C (V.24), 9600 baud, 8 n 1, ***PC/data port:*** USB (full speed, V1.1 compatible with V2.0), ***Ethernet port (LAN):*** 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***Housing:*** plastic, three parts with wall-mountable chassis, module carrier and cover, ***Dimensions:*** 220 mm x 354 mm x 142 mm, ***Weight:*** approx. 2.4 kg without card modules

● **Technical data COMmander® Basic.2 19“** like COMmander Basic.2, but
Housing: closed 19" slide-in housing, 3 HU with stainless steel front, ***Dimensions:*** 483 mm x 132.5 mm x 410 mm, ***Installation depth:*** 430 mm from front plate (incl. cable installation at the back), ***Weight:*** approx. 6 kg without card modules

* will become available later by means of a software update and matching hardware, see also page 6 (COMmander modules) and page 17 (COMfortel VoIP 2500)

COMmander Basic.2 19“
with fully equipped patch panel.

The scope of delivery includes
2 x 8 RJ-45 Western jacks.

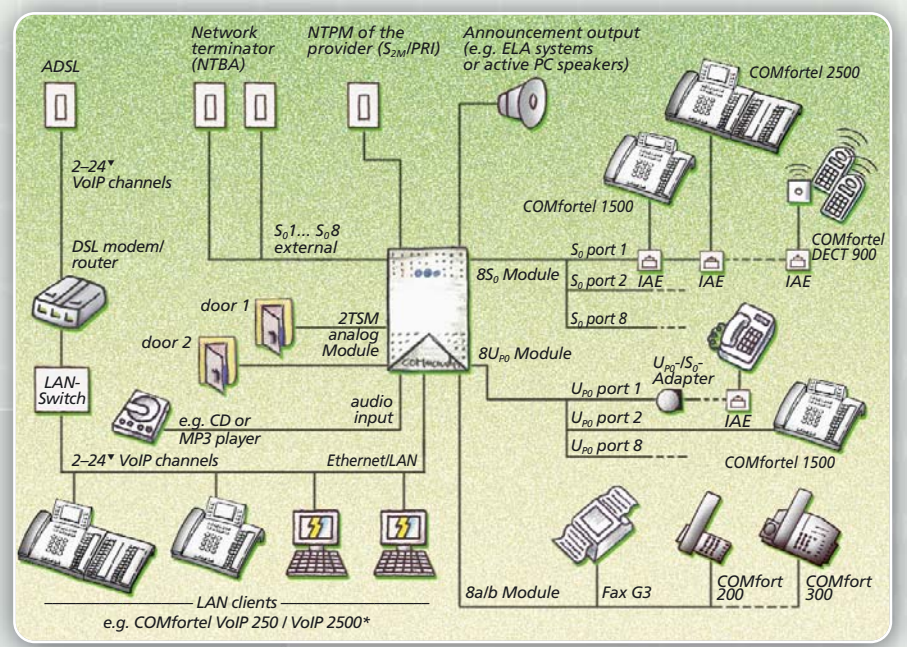
A well-structured **ITC system**

COMmander® Basic.2 19“

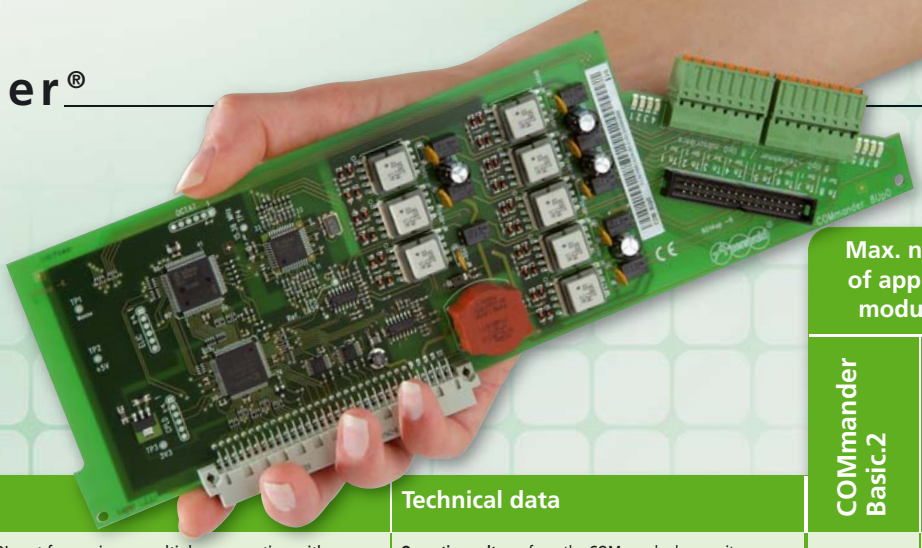
COMmander Basic.2 19" is the professional for your IT environment and is designed for structured cabling systems (SCS). But functionally it is identical to the wall-mount version of COMmander Basic.2.

All major ports are located on the stainless steel front of COMmander Basic.2 19". It has RJ-45 jacks for trunk line, extension and door ports, and you can add further jacks if you need them. The patch panels enable fast installation, with no tools required.

- Full modular ICT system for ISDN and VoIP* connections
- 34 external calls simultaneously
- 24 VoIP calls simultaneously*, 2 VoIP calls in the basic setup
- Full VoIP system integration (e.g. automatic routing, call distribution, trunk line authorisations, barred and permitted numbers)
- 48 extension ports
- System telephony via ISDN (S_0/U_{P0}) and IP*
- 64 groups
- Group functions with smart ringing options (all, linear or incremental)
- Waiting Field for 34 calls 27, can be key-operated with the corded COMfortel system telephones
- Auto Attendant, 10 targets parallel and/or cascaded 27
- Music on Hold (1 melody, up to 6 min.) with additional announcement (up to 1 min.) can be uploaded from PC in WAV format
- Hotel Function (check-in/check-out, printing of bills without a PC) 26
- Boss/Secretary function, flexible assignment of extensions
- CTI – computer-based telephony via LAN-TAPI 24



▼ COMmander VoIP Modules required



This is an overview of all module configuration options for the various COMmander models.

	Details	Technical data	Max. number of applicable modules in COMmander Basic.2	Max. number of applicable modules in COMmander Business
COMmander S_{2M} Module	Adds one PRI port for a primary multiplex connection with up to 30 B channels of the network provider. The channels can be configured direction-dependent (in, out, or in/out). When used with a COMmander Basic.2 19" or a Business 19" version, an additional connection adapter (BU-S2M/BA-S2M) for the front plate is required.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **Outside line:** 1 S_{2M} port (PRI), Euro ISDN (DSS-1), point-to-point (PTP), **Dimensions:** 293 mm x 70 mm x 16 mm, **Weight:** 105 g.	1	1
COMmander 4S_0 Module (Rev. 3)	Adds 4 S_0 ports, which can be configured as internal or external ports. When used with a COMmander Basic.2 19" or Business 19", an additional patch connector (BU-P16/BA-P08) for the front plate may be required, depending on the expansion level.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **Outside lines:** up to 4 S_0 ports, Euro ISDN (DSS-1), point-to-multipoint (PTMP) or point-to-point port (PTP), **Internal ISDN ports:** up to 4 S_0 ports Euro ISDN (DSS-1), PTMP, **Dimensions:** 293 mm x 97 mm x 16 mm, **Weight:** 172 g.	5	12
COMmander 8S_0 Module	Adds 8 S_0 ports, 4 of which can be configured as internal or external ports. The remaining 4 ports are internal ports. When used with a COMmander Basic.2 19" or Business 19", an additional patch connector (BU-P16/BA-P08) for the front plate may be required, depending on the expansion level.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **Outside lines:** up to 4 S_0 ports, Euro ISDN (DSS-1), point-to-multipoint (PTMP) or point-to-point port (PTP), **Internal ISDN ports:** up to 8 S_0 ports Euro ISDN (DSS-1), PTMP, **Dimensions:** 293 mm x 97 mm x 16 mm, **Weight:** 180 g.	3	9
COMmander 8U_{P0} Module	Adds 8 U_{P0} ports, for 2-wire integration of system telephones and ISDN terminal devices. For 2-wire to 4-wire conversion (e.g. for older COMfort system telephones), the COMmander U_{P0}/S_0 Adapter is required. When used with a COMmander Basic.2 19" or Business 19", an additional patch connector (BU-P16/BA-P08) for the front plate may be required, depending on the expansion level.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **ISDN ports:** for up to 8 U_{P0} ports, Euro ISDN (DSS-1), point-to-multipoint port (PTMP), **Range:** up to 1000 m, **Dimensions:** 293 mm x 97 mm x 16 mm, **Weight:** 123 g.	4	9
COMmander 8a/b Module	Adds 8 analog extensions with number and name display (CLIP/CNIP). When used with a COMmander Basic.2 19" or Business 19", an additional patch connector (BU-P16/BA-P08) for the front plate may be required, depending on the upgrade level.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **Extension ports:** for 8 analog terminal devices, pulse/tone dialling, CLIP-enabled, **Range:** 2 x 50 Ω, 790 m with Ø 0.6 mm wire, **Dimensions:** 293 mm x 97 mm x 16 mm, **Weight:** 133 g.	4	8
COMmander 2TSM analog Module	This audio intercom/door phone system module has ports for 2 door terminals (2 door openers and 4 bell ports), 6 relays (2 will be used for each door terminal), 1 port for a second doorbell, 1 external audio input, 1 external audio output. When used with a COMmander Basic.2 19" or Business 19", an additional connection adapter (BU-TSM/BA-TSM) for the front plate is required.	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **Door ports:** compliant with FTZ 123 D 12-0, **Max. load door opener/relay:** 30 V AC, 1 A, **Doorbell/Pushbutton Input:** for 4 doorbell buttons, 5 to 15 V AC or DC positive TGND / for 4 potential-free door catches, **Dimensions:** 293 mm x 75 mm x 16 mm, **Weight:** 120 g.	1	4
U_{P0}/S_0 Adapter	Additional adapter for the COMmander 8U_{P0} Module, for the conversion from the 2-wire U_{P0} port to the 4-wire S_0 port, e.g. for the connection of older COMfort system telephones and other ISDN devices.	**Operating voltage:** from the COMmander base unit, **ISDN port 1:** 1 U_{P0} port for connection with the 8U_{P0} Module, **ISDN port 2:** 1 S_0 port, Euro ISDN (DSS-1), point-to-multipoint port (PTMP), **Range:** up to 1000 m, **Case:** plastic, 2 parts, **Dimensions:** Ø 95 mm x 33 mm, **Weight:** 100 g.	1 per internal U_{P0} port	
+ + + Product Preview + + + Product Preview + + + Product Preview + + + Product Preview + + +				
COMmander 8VoIP Module NEW availability planned for Q4/2008	Adds 8 VoIP channels for Internet and internal IP telephony. To ensure optimal quality of speech with low bandwidth additional speech codecs are provided. When inserting the first COMmander VoIP module the two VoIP channels on the base board will be switched off due to technical reasons	**Operating voltage:** from the COMmander base unit, **Installation: slot inside the COMmander unit,** **VoIP standard:** SIP acc. to RFC 3261, **VoIP codecs external:** G.711, G.723.1, G.726, G.729 A/E, iLBC **VoIP codecs internal:** G.711, iLBC **Dimensions:** 293 mm x 97 mm x 20 mm, **Weight:** approx. 180 g.	2	4
COMmander 16VoIP Module NEW availability planned for Q4/2008	Adds 16 VoIP channels for Internet and internal IP telephony. To ensure optimal quality of speech with low bandwidth additional speech codecs are provided. When inserting the first COMmander VoIP module the two VoIP channels on the base board will be switched off due to technical reasons	**Operating voltage:** from the COMmander base unit, **Installation:** slot inside the COMmander unit, **VoIP standard:** SIP acc. to RFC 3261, **VoIP codecs external:** G.711, G.723.1, G.726, G.729 A/E, iLBC **VoIP codecs internal:** G.711, iLBC **Dimensions:** 293 mm x 97 mm x 20 mm, **Weight:** approx. 180 g.	1	4

Configuration examples COMmander® Basic.2

	Necessary trunk lines	Necessary internal subscribers for	Suggested system plus expansions
Example: minimum expansion with ISDN trunks and digital/analog subscribers	2 x S_0 (ISDN) = 4 channels 2 x VoIP = 2 channels **Total: 6 channels**	**4 digital terminals,** e.g. 4 system or ISDN telephones **8 analog terminals,** e.g. 6 analog telephones 1 analog answering machine 1 fax machine	**COMmander Basic.2 with** 1 x COMmander 4S_0 Module 1 x COMmander 8a/b Module
Example: complete expansion with ISDN trunks and analog subscribers	4 x S_0 (ISDN) = 8 channels 2 x VoIP = 2 channels **Total: 10 channels**	**32 analog terminals,** e.g. 30 analog telephones 1 analog answering machine 1 fax machine	**COMmander Basic.2 with** 1 x COMmander 4S_0 Module 4 x COMmander 8a/b Module
Example: complete expansion with PRI/ISDN trunks, digital subscribers and door phone ports	1 x PRI = 30 channels 2 x S_0 (ISDN) = 4 channels **Total: 34 channels**	**36 digital terminals,** e.g. 12 system or ISDN telephones 24 VoIP system* or SIP telephones **2 door stations (FTS 123 D12-0),** e.g. 2 TFS-Dialog 102	**COMmander Basic.2 with** 1 x COMmander S_{2M} Module 1 x COMmander 8S_0 Module 1 x COMmander 8VoIP Module* 1 x COMmander 16VoIP Module* 1 x COMmander 2TSM analog Module
Example: complete expansion with VoIP trunks, ISDN trunks and digital/analog subscribers	4 x S_0 (ISDN) = 8 channels 8 x VoIP = 8 channels **Total: 16 channels**	**40 digital terminals,** e.g. 24 system or ISDN telephones 8 system telephones 8 VoIP system* or SIP telephones **8 analog terminals,** e.g. 6 analog telephones 1 analog answering machine 1 fax machine	**COMmander Basic.2 with** 1 x COMmander 16VoIP Module* 2 x COMmander 8S_0 Module 1 x COMmander 8U_{P0} Module 1 x COMmander 8a/b Module

Configuration examples COMmander® Business

	Necessary trunk lines	Necessary internal subscribers for	Suggested system plus expansions
Example: partial expansion with ISDN trunks, digital/analog subscribers and door phone	4 x S_0 (ISDN) = 8 channels 2 x VoIP = 2 channels **Total: 10 channels**	**24 digital terminals,** e.g. 8 system or ISDN telephones 16 system telephones **16 analog terminals,** e.g. 10 analog telephones 2 analog answering machines 4 fax machines **1 door stations ((FTS 123 D12-0),** e.g. 1 TFS-Dialog 104	**COMmander Business with** 1 x COMmander 8S_0 Module 2 x COMmander 8U_{P0} Module 2 x COMmander 8a/b Module 1 x COMmander 2TSM analog Module
Example: partial expansion with PRI/ISDN trunks and analog/digital subscribers	1 x PRI = 30 channels 3 x S_0 (ISDN) = 6 channels 2 x VoIP = 2 channels **Total: 38 channels**	**66 digital terminals,** e.g. 42 system or ISDN telephones 24 system telephones **16 analog terminals,** e.g. 14 analog telephones 1 analog answering machine 1 fax machine	**COMmander Business with** 1 x COMmander S_{2M} Module 3 x COMmander 8S_0 Module 3 x COMmander 8U_{P0} Module 2 x COMmander 8a/b Module
Example: complete expansion with ISDN trunks, analog subscribers and door phones	8 x S_0 (ISDN) = 16 channels 2 x VoIP = 2 channels **Total: 18 channels**	**16 digital terminals,** e.g. 16 system or ISDN telephones **64 analog terminals,** e.g. 60 analog telephones 2 analog answering machine 2 fax machine **6 door stations ((FTS 123 D12-0),** e.g. 6 TFS-Dialog 102	**COMmander Business with** 4 x COMmander 4S_0 Module 8 x COMmander 8a/b Module 3 x COMmander 2TSM analog Module
Example: complete expansion with PRI trunk, digital/analog subscribers and door phones	1 x PRI = 30 channels 4 x S_0 (ISDN) = 8 channels **Total: 38 channels**	**104 digital terminals,** e.g. 40 system or ISDN telephones 64 VoIP system* or SIP telephones **8 analog terminals,** e.g. 6 analog telephones 1 analog answering machine 1 fax machine **2 door stations ((FTS 123 D12-0),** e.g. 2 TFS-Dialog 102	**COMmander Business with** 1 x COMmander S_{2M} Module 1 x COMmander 4S_0 Module 5 x COMmander 8U_{P0} Module 4 x COMmander 16VoIP Module* 1 x COMmander 8a/b Module 1 x COMmander 2TSM analog Module

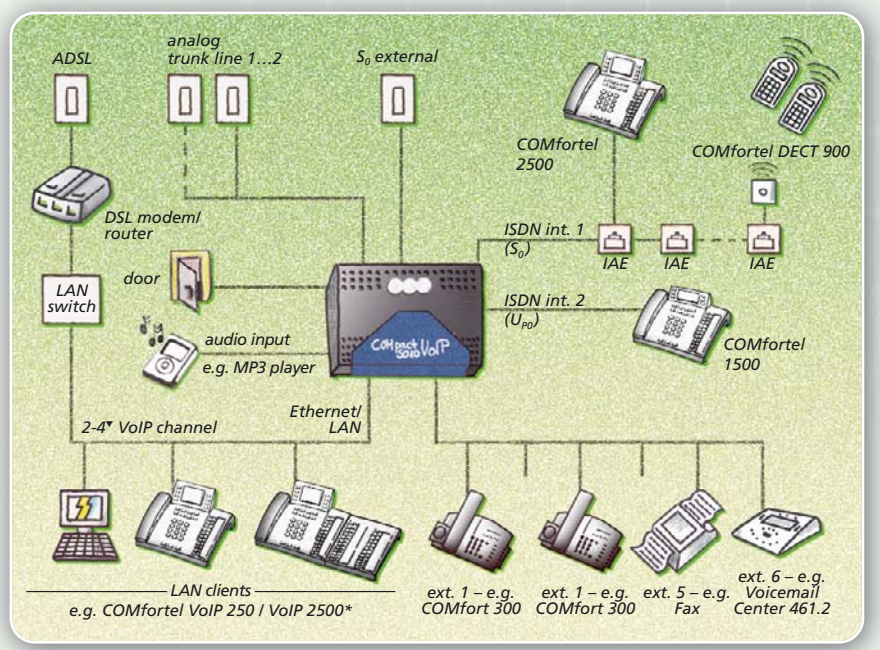
When inserting the first COMmander VoIP module the two VoIP channels on the base board will be switched off due to technical reasons

*** Internal IP telephony with IP system telephones and other SIP devices will become available later by means of a software update and matching hardware, see also page 6 (COMmander modules) and page 17 (COMfortel VoIP 2500)**

Choose your type of line
ISDN | Analog | VoIP

Whatever network, whatever provider and whatever service you opt for – the COMpact 5010 and 5020 VoIP are the ideal choice for every telephone line. Save money on every call with a system that automatically selects the network with the cheapest rate for you.

Both versions feature ports for analog and digital terminal devices as part of their basic configurations. Their capabilities can be extended with add-on modules for trunk line ports, subscribers and door intercom functions. You can make use of your existing telephones and other terminal devices or use the latest ISDN or IP system telephones* from Auerswald. And they are always a perfect fit: ISDN system telephones can be connected to 4-wire or 2-wire lines and adjust to the line automatically. That means you can carry on using your "old" analog lines. The IP system telephone* does without telephone wiring altogether and can simply be set up wherever access to your computer network is available.



▼ COMpact 2VoIP Module required

COMpact 5010 VoIP

This is the ideal communications centre for agencies, law offices, small businesses and the technically minded home user. With the necessary modules, the COMpact 5010 VoIP provides 8 trunk lines (ISDN, analog, VoIP) and ports for 10 subscribers.

- PBX system for ISDN, VoIP and analog connections
- 2 ISDN ports, external/internal
- Expandable with analog trunk lines and with door/switching functions
- 2 VoIP channels, expandable to 4
- Full VoIP system integration, e.g. automatic routing, call distribution etc.
- Internal ISDN ports can be configured as S_0 or U_{P0} ports
- Least Cost Routing with manual updates of call rate tables 24
- Group functions with intelligent call variants (all, linear or incremental)
- External extensions (Home Office) with COMfortel VoIP 2500* (via VPN)
- Music on Hold (approx. 6 minutes) and announcement (approx. 1 minute), downloadable as WAV file
- Computer-based telephony in the network (Third-Party CTI, LAN-TAPI) 24
- System telephony via ISDN (S_0/U_{P0}) and IP*

For the configuration of the PBX system only an operating system like Windows XP, Vista, Mac OS X or Linux is necessary with a compatible web browser.

COMpact 5010 VoIP

● **Basic configuration** ***Trunk line ports:*** 1 S_0 port (can be switched to internal S_0/U_{P0}), 2 VoIP channels (switchable to internal*), ***Extension ports:*** 1 (max. 2) S_0/U_{P0} port, 6 analog ports, 2 VoIP channels* (switchable to external), ***PC port:*** Ethernet

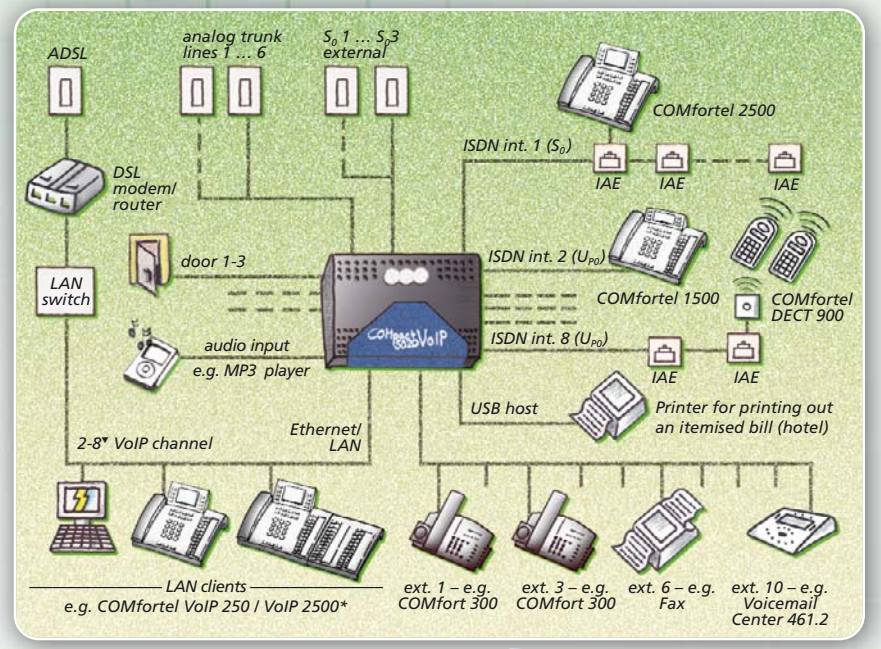
● **Maximum configuration** ***Trunk line ports:*** 1 S_0 port (can be switched to internal S_0/U_{P0}), 2 analog trunk lines (POTS), 4 VoIP channels (switchable to internal*), ***Extension ports:*** 1 (max. 2) S_0/U_{P0} port, 6 analog ports, 4 VoIP channels (switchable to external*), ***Door ports:*** 1 door port (1 door opener, 2 bell ports), ***Miscellaneous:*** 1 audio input/output

● **Technical Data** ***Power supply:*** earthed safety plug, 230 V +/-10 %, 50 Hz, max. 30 W, ***Trunk line ports:*** S_0 port(s), Euro-ISDN (DSS-1), PTMP/PTP connection, analog dial-up line, CLIP-enabled, tone dialling, VoIP channels (SIP acc. to RFC 3261), ***ISDN extension ports:*** S_0 and U_{P0} port(s), Euro ISDN (DSS-1), PTMP connection, U_{P0} range up to 1000 m, ***Analog extension ports:*** CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), ***VoIP extensions*:*** SIP as per RFC 3261, ***Ethernet port (LAN):*** 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), full/half duplex auto-negotiation, ***Case:*** plastic chassis with cover, ***Dimensions:*** 301 mm x 243 mm x 86.5 mm, ***Weight:*** approx. 1500 g

* will become available later by means of a software update and matching hardware, see also page 11 (COMpact modules) and page 17 (COMfortel VoIP 2500)

COMpact 5020 VoIP

The COMpact 5020 VoIP offers even more capabilities with a maximum of 14 trunk lines* and 26 subscriber ports. Its professional functions have been designed especially for use in a business setting, e.g. its Auto Attendant or the Waiting Field.
If the reception is busy, the calls are held here by the system and only connected when a button is pressed. In hotels and guesthouses, the system functions as the telephone exchange with ports for reception and room telephones, and can even send a guest's individual call list to the printer via USB.



▼ COMpact 6VoIP Module required

TAPI USB LCR CTI ETHERNET 10/100 MBit/s VoIP

Exclusive for COMpact 5020 VoIP

- Expansion possibilities with ISDN, analog and VoIP trunk lines as well as with door ports
- Expansion of internal subscribers with ISDN and VoIP channels
- Waiting Field for 10 (14*) simultaneous external calls (ISDN, analog, VoIP) 27
- Hotel Function with check-in/ check-out 26

You can find a complete list of card modules for COMpact 5010/5020 VoIP on page 11.

These options can be activated for COMpact 5010 VoIP / 5020 VoIP in the Upgrade Center:

- Additional internal numbers (up to 64), 32 included
- Soft LCR (extensions in increments of 8, up to 64), 8 included
- Call Through connections (all lines), factory settings permit 1 connection
- Auto Attendant (enhanced Announcement before Answering)
- Call records (in increments of 2000, up to 6000), factory settings permit 2000
- LAN-TAPI (extensions in increments of 8, up to 20), 4 included
- X.31 on internal S_0 port (X.25 in D-channel)
- Project assignment of calls

only for COMpact 5020 VoIP
- Hotel Function

COMpact 5020 VoIP

● **Basic configuration** ***Trunk line ports:*** 1 S_0 port (can be switched to internal S_0/U_{P0}), 2 VoIP channels* (switchable to internal), ***Extension ports:*** 1 (max. 2) S_0/U_{P0} port, 10 analog ports, 2 VoIP channels* (switchable to external), ***PC port:*** Ethernet, ***Miscellaneous:*** USB printer port (call record printout)

● **Maximum configuration** ***Trunk line ports:*** 3 S_0 port (can be switched to internal S_0/U_{P0}), 6 analog ports (POTS), 8 VoIP channels (switchable to internal*), ***Extension ports:*** 8 S_0/U_{P0} ports (3 ports switchable to external), 10 analog ports, 8 VoIP channels* (switchable to external), ***Door ports:*** 3 door ports (3 door openers, 6 bell ports), ***Miscellaneous:*** 1 audio input/output, 2 additional audio outputs

● **Technical Data** ***Power supply:*** earthed safety plug, 230 V +/-10 %, 50 Hz, max. 40 W, ***Trunk line ports:*** S_0 port(s), Euro-ISDN (DSS-1), PTMP/PTP connection, analog dial-up line, CLIP-enabled, tone dialling, VoIP channels (SIP acc. to RFC 3261), ***ISDN extension ports:*** S_0 and U_{P0} port(s), Euro ISDN (DSS-1), PTMP connection, U_{P0} range up to 1000 m, ***Analog extension ports:*** CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), ***VoIP extensions*:*** SIP as per RFC 3261, ***Printer port:*** USB host V1.1, ***Ethernet port (LAN):*** 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), full/half duplex auto-negotiation, ***Case:*** plastic chassis with cover, ***Dimensions:*** 301 mm x 243 mm x 86.5 mm, ***Weight:*** approx. 1500 g

* will become available later by means of a software update and matching hardware, see also page 11 (COMpact modules) and page 17 (COMfortel VoIP 2500)

COMpact 4410 USB

Just see for yourself: installing and configuring is beautifully simple. And then you're in control: you can make calls, send faxes, open doors, or use the integrated USB port for instant web access. And just think how much you can save: like other Auerswald systems, the COMpact 4410 USB offers Least Cost Routing, an integrated function that automatically dials the cheapest provider. External subscribers can benefit too, even from their mobile phones – with the smart Call Through function. The automatic update function keeps your system always up-to-date.

The COMpact 4410 USB comes with two S_0 ports – one external and one internal. As your requirements increase, you can add a module with two more S_0 ports – one fixed internal, the other one variable. The ten extension ports let you connect multiple analog terminal devices. You can also upgrade with two modules for door phone and switching functions. Its USB interface supports both CAPI and TAPI, so your COMpact 4410 USB can work as an ISDN adapter. And the audio input lets you not just record external Music on Hold – you can even hook up an amplifier or active speakers!

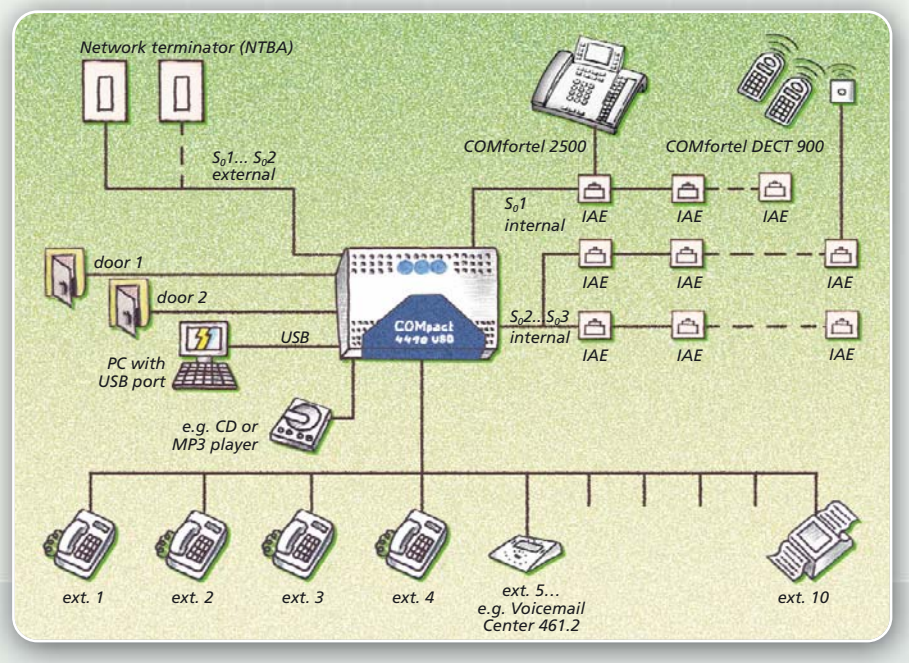
Enter **today** –
Upgrade **tomorrow**

COMpact 2206 USB

Perfect for smaller offices with a fixed setup offering two S_0 ports – one external and one internal – plus six analog extension ports. It can be upgraded with one module for door phone and switching functions.

- Number and name display (CLIP and CNIP)
- Integrated ISDN PC adapter functionality
- USB port for configuration, CTI, data transfer and internet
- Upgradeable door and switching functions
- Least Cost Routing with support for internet telephony via external VoIP gateway and mobile networks via GSM adapter 24
- Hotel Function with check-in/check-out (with COMpact 4410 USB 26)
- Configuration tools for Windows, Linux and Mac OS X

➡ *To view the whole range of functions and to compare the different systems, please refer to the back pages.*

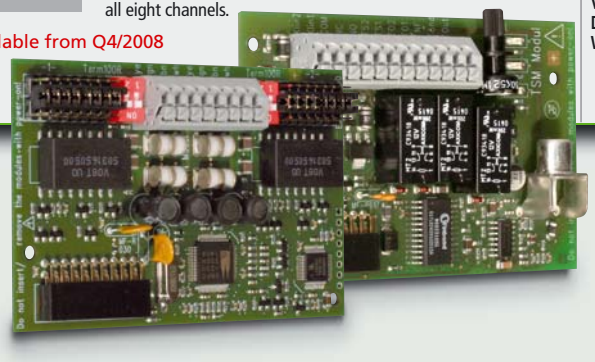


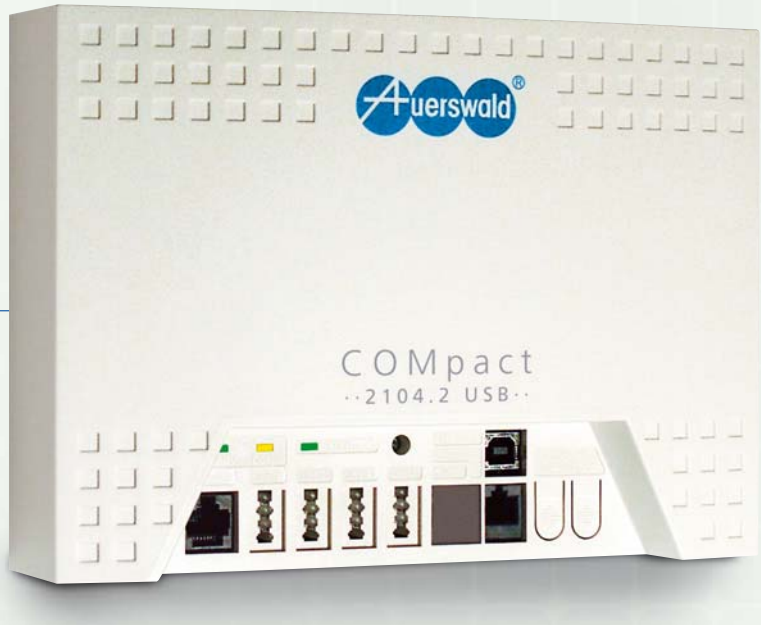
COMpact 4410 USB (COMpact 2206 USB)

- **Basic configuration** ***Trunk line port:*** 1 S_0 port, ***Extension ports:*** 1 S_0 port, 10 analog ports, ***PC connections:*** USB, V.24, ***Miscellaneous:*** audio input/output (***COMpact 2206 USB:*** 6 analog ports)
- **Maximum configuration** ***Trunk line port:*** 2 S_0 ports, ***Extension ports:*** 3 S_0 ports (1 port switchable to external), 10 analog ports, ***Door ports:*** 2 door ports (4 door bells, 2 door openers) (***COMpact 2206 USB:*** same as basic configuration plus 1 door port (2 door bells, 1 door opener))
- **Technical data** ***Power supply:*** earthed safety plug, 230 V ± 10 %, 50 Hz, 25 W max., (***COMpact 2206 USB:*** 16 W max.) ***Trunk line port:*** S_0 port(s), Euro ISDN (DSS-1), PTMP or PTP, ***Internal ISDN ports:*** S_0 port(s), Euro ISDN (DSS-1), PTMP, ***Analog extension ports:*** CLIP-enabled, symmetrical, pulse/tone dialling, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), ***PC/printer port:*** RS-232 C (V.24), 9600 baud, 8 n 1, ***PC/data port:*** USB (Full Speed, V1.1 compatible with V2.0), ***Case:*** plastic case with cover and snap-on lid, ***Dimensions:*** 301 mm x 243 mm x 86.5 mm, ***Weight:*** approx. 1500 g

More system telephones, a door phone system, or additional trunk lines – have a look at what the add-on modules for the different models of the COMpact product family can offer you.

	Details	Technical data	Max. number of modules usable with COMpact 2206 USB	4410 USB	5010 VoIP	5020 VoIP
COMpact 2VoIP Module	Adds two VoIP channels for internet and internal IP telephony*. Provides additional codecs with voice compression to ensure optimum sound quality, even for smaller bandwidths for all four channels.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **VoIP standard:** SIP as per RFC 3261 **VoIP codecs:** G.711, G.723.1, G.726, G.729 A/E, iLBC **Dimensions:** 37 mm x 43 mm x 3 mm **Weight:** approx. 6 g	–	–	1	1
COMpact POTS Module	Adds an analog trunk line (POTS – plain old telephone service). The Caller ID feature (CLIP/CNIP) ensures you benefit from ISDN extras even with an analog line. Analog-only operation is possible, but as well mixed mode with ISDN and VoIP trunk lines.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Trunk line port:** analog dial-up line, tone dialling, CLIP-enabled (FSK/DTMF) **Dimensions:** 92 mm x 60 mm x 17 mm **Weight:** approx. 50 g	–	–	1	3
COMpact 2POTS Module	Adds two analog trunk lines (POTS – plain old telephone service). The Caller ID feature (CLIP/CNIP) ensures you benefit from ISDN extras even with an analog line. Analog-only operation is possible, but as well mixed mode with ISDN and VoIP trunk lines.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Trunk line port:** 2 analog dial-up lines, tone dialling, CLIP-enabled (FSK/DTMF) **Dimensions:** 92 mm x 60 mm x 17 mm **Weight:** approx. 50 g	–	–	1	3
COMpact 2ISDN Module	Adds two variable ISDN ports (external/internal). When used as internal ports, either S_0 (4-wire) and U_{P0} (2-wire) operation is possible. You can connect COMfortel system telephones or any other ISDN terminal device to the internal ISDN port.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Trunk line port:** 0-2 S_0 ports, Euro ISDN (DSS-1), PTMP or PTP connection **Internal ISDN ports:** 0-2 S_0/U_{P0} ports, Euro ISDN (DSS-1), PTMP connection **Dimensions:** 92 mm x 60 mm x 16 mm **Weight:** approx. 50 g	–	–	–	3
COMpact TSM Module	Adds a door terminal including a door opener and two bell ports. One of the bell ports can be used for an alarm system. An additional relay allows remote switching of electrical devices. If no door terminal is used, a total of three relays is available. The combined audio input/output lets you connect an MP3 player for external Music on Hold or a PA system for announcements.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Door phone port:** compliant with FTZ 123 D12-0 **Max. load relay:** 30 V, 1 A **Input:** for 2 doorbell buttons 5–15 V AC or DC positive TGND / for 2 potential-free door catches **Dimensions:** 92 mm x 60 mm x 16 mm **Weight:** approx. 50 g	–	–	1	3
COMpact 2S_0 Module	Adds one fixed internal and one variable S_0 port (external/internal). You can connect COMfortel system telephones or any other ISDN terminal device to the internal S_0 port.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Trunk line port:** 0-1 S_0 ports, Euro ISDN (DSS-1), PTMP or PTP connection **Internal ISDN ports:** 1-2 S_0 ports, Euro ISDN (DSS-1), PTMP connection **Dimensions:** 92 mm x 60 mm x 17 mm **Weight:** approx. 50 g	–	1	–	–
COMpact TS Module	Adds a door terminal including a door opener and two bell ports. An additional relay allows remote switching of electrical devices. If no door terminal is used, a total of three relays is available.	**Operating voltage:** from the COMpact unit **Installation:** slot inside the COMpact system **Door phone port:** compliant with FTZ 123 D12-0 **Max. load relay:** 30 V, 1 A **Input:** for 2 doorbell buttons 5–15 V AC or DC positive TGND / for 2 potential-free door catches **Dimensions:** 92 mm x 60 mm x 14 mm **Weight:** approx. 50 g	1	2	–	–
U_{P0}/S_0 Adapter	Additional adapter for the COMpact 2ISDN Module, for the conversion from the 2-wire U_{P0} port to the 4-wire S_0 port, e.g. for the connection of older COMfort system telephones.	**Operating voltage:** from the COMpact base unit, **ISDN port 1:** 1 U_{P0} port for connection with a 2ISDN Module, **ISDN port 2:** 1 S_0 port, Euro ISDN (DSS-1), PTMP connection, **Range:** up to 1000 m, **Case:** plastic, 2 parts, **Dimensions:** Ø 95 mm x 33 mm, **Weight:** 100 g	–	–	1 per internal U_{P0} port	
+ + + Product Preview + + + Product Preview + + + Product Preview + + + Product Preview + + +						
COMpact 6VoIP Module	Adds six VoIP channels for internet and internal IP telephony*. Provides additional speech codecs with voice compression to ensure optimum sound quality, even for smaller bandwidths for all eight channels. available from Q4/2008	**Operating voltage:** from the COMpact 5020 VoIP **Installation:** slot inside the COMpact 5020 VoIP **VoIP standard:** SIP acc. to RFC 3261 **VoIP codecs:** G.711, G.723.1, G.726, G.729 A/E, iLBC **Dimensions:** 52 mm x 53 mm x 3 mm **Weight:** approx. 12 g	–	–	–	1





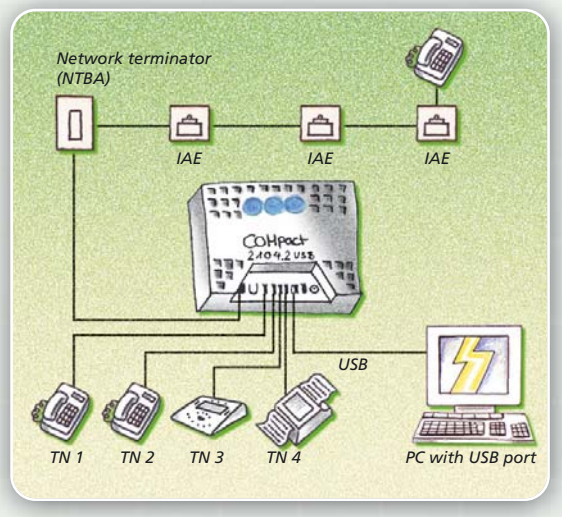
COMpact 2104.2 USB

If you need a PBX system that is easy to use, has four extensions, but won't cost the earth, the COMpact 2104.2 USB is the system for you! It's an inexpensive investment that helps you save money every time you make a call: the built-in Least Cost Router automatically finds a low-cost network provider.

The COMpact 2104.2 USB comes with a USB-PC interface and is prepared for state-of-the-art communication options such as computer-assisted telephony (CTI), use of your PC as a fax and answering machine, or data transfer and internet access.

The central telephone directory holds up to 400 names and numbers, allowing the system to retrieve callers' names and show them on the display of modern telephones like COMfort 300. And our COMlist software provides you with an itemised view of all call records – at no extra cost, of course.

With its ready-to-use case and the COMset software package, installation and setup of the COMpact 2104.2 USB are quick and simple, letting you enjoy the system's little luxuries within only a few minutes. Important for future use: The automatic update function ensures your system always has the latest operating software.



Pay little, **get a lot**

- Caller ID with number and name (CLIP/CNIP)
- Least Cost Routing, including internet telephony (VoIP via external gateway)
- Call Through – for low-cost calls from your mobile via the PBX system
- Set your own barred and allowed numbers for outgoing and incoming calls (dialler protection, Do-not-disturb)
- Six configurations (e.g. day/night mode, holiday mode), manual or timer-controlled operation

➡ *To view the complete range of functions and compare the different systems, please refer to the back pages.*

COMpact 2104.2 USB

● **Configuration** ***Trunk line port:*** 1 S_0 port, ***Extension ports:*** 4 a/b ports, ***PC port:*** USB

● **Technical Data** ***Power supply:*** AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 9 W, ***Trunk line port:*** S_0 port, Euro ISDN (DSS-1), PTMP/PTP connection, ***Analog extension ports:*** CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω approx. 790 m with Ø 0.6 mm), ***PC/data port:*** USB (full speed, V1.1 compatible with V2.0), ***Case:*** plastic chassis with cover, ***Dimensions:*** 217 mm x 157 mm x 65 mm, ***Weight:*** unit approx. 540 g, AC adapter approx. 570 g

If you needed proof that inexpensive entry-level telephones can look modern and stylish, here it is: Auerswald's COMfort 200. It's also easy to use, with functions like Redialling or the abbreviated dialling memory.

- Analog telephone for use with Auerswald PBX systems or analog trunk lines
- Speed dial memory for frequently used numbers
- 10 abbreviated dialling numbers
- 3 different ring tones
- 3 different ringer volumes
- Desktop use or wall-mountable

COMfort 200

A stylish entry-level analog phone

COMfort 300

COMfort 300 is an easy-to-use analog telephone that's perfect for use with Auerswald PBX systems. Its modern and stylish design and the wide range of functions are definite points in favour – and it offers excellent value for money!

- 3-line illuminated display
- Phone book for up to 70 names and numbers
- Caller list of the last 61 calls, numbers can be copied to local phone book
- Redialling of the last 10 numbers dialled
- 3-number abbreviated dialling memory
- Display languages include English, German, French, Spanish
- Desktop use or wall-mountable

COMfort 200

● Technical data ***Power supply:*** analog port of the PBX system or telephone network, ***System connection:*** analog port of the PBX system or telephone network, ***Controls:*** Keypad with vanity code, 5 function keys, ***Case:*** plastic, black, ***Dimensions:*** 160 mm x 180 mm x 112 mm, ***Weight:*** approx. 460 g

COMfort 300

● Technical data ***Power supply:*** analog port of the PBX system or the telephone network (for basic functions), additional AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, 2.9 VA max. and 4 AAA batteries, ***System connection:*** analog port of the PBX system or telephone network, ***Displays:*** illuminated 3-line LCD, 1 LED, ***Controls:*** Keypad with vanity code, 12 function keys, 3 abbreviated dialling keys, ***Case:*** plastic, black, ***Dimensions:*** 252 mm x 189 mm x 112 mm, ***Weight:*** approx. 1000 g incl. AC adapter and batteries

Excellent performance

What distinguishes the system telephones of the COMfortel range? They are intuitive to use, can be upgraded with modules, have a state-of-the-art design, and offer high investment protection. The development team wanted to create telephones that would be even easier and more efficient to use. You can access almost any function of your PBX system* at the touch of a key. An LED next to the key shows you the status. Auerswald's COMfortel range has everything you want from a phone – an Intercom function for automatic hands-free operation, Power Dialling, and a central caller list for hunt groups.

Our corded COMfortel system telephones are available in black, dark blue, and light grey (white). Whichever model you opt for – it will bring perfect ease of use to your home or office. The operating software's automatic update function ensures you always have the latest technology.

* COMpact 2206 USB, 4410 USB, 5010 VoIP, 5020 VoIP and COMmander Basic, Basic.2, Business

COMfortel® 1500

If you're looking for a digital system telephone that is easy to use but won't break the bank, Auerswald's COMfortel 1500 is just what you need. Its graphic display with the six context-specific softkeys makes the telephone simple to operate and provides quick access to the menu.

- Access to the system telephone directory
- Additionally 400 entries locally, 4 numbers plus text info per record possible
- Caller list for the last 30 missed calls
- Busy indicators for extensions and trunk lines
- Speakerphone/hands-free, phone lock, emergency calls possible

Top Function by AUERSWALD

Both system telephones are suitable for connection to S_0 and U_{P0} ports without any modification.
They even detect the type of port and adjust automatically. And they manage all that without any additional power supply.

COMfortel® 1500

● **Technical data** ***Power supply:*** PBX system's internal S_0 or U_{P0} port, max 2 W, ***System connection:*** PBX system's internal S_0 or U_{P0} port, ***Displays:*** 128 x 32 pixel LCD, 18 LEDs (some multicolour), ***Controls:*** Keypad with vanity code, 11 function keys, 6 softkeys, 15 programmable function keys (2 levels), ***Handset:*** Electret microphone, dynamic speaker, hearing aid-compatible, ***Speakerphone:*** 8 Ω, Ø 66 mm, ***Hook switch:*** magnetic, ***Case:*** plastic; black, dark blue, or light grey (white), ***Dimensions:*** 261 mm x 89 mm x 216 mm, ***Weight:*** approx. 980 g

➡ *To view the whole range of functions and to compare the different telephones, please refer to the back pages.*

COMfortel® 2500

COMfortel 2500:
The large illuminated display shows the complete connection path including the extension which has forwarded the call.

You use the telephone frequently, and you want a phone that is "just right". Then how about our digital system telephone COMfortel 2500? Its large illuminated graphic display with the eight context-specific softkeys makes the telephone easy to operate and provides quick access to the menu. An integrated USB interface and the COMsuite software package that comes with the phone ensure simple data communication – no need for additional hardware!

The COMfortel 2500's modular concept lets you add up to three COMfortel Xtension30 modules for extra function keys. You can fit them on either side of your telephone. With all modules fitted, you have 105 function keys available.

- Access to the system telephone directory
- Additionally 800 entries locally, 4 numbers plus text info per record possible
- Status line provides information such as Call Forwarding, Mute, or hands-free active
- Hotel Function (reception telephone) 26
- Headset jack with DHSG support for wireless headsets
- Easy-to-operate answering machine (optional)

COMfortel 2500 with
one COMfortel Xtension30 module

You need a standard SD card (up to 2 Gigabytes) to save your announcements and messages on the integrated answering machine. Why not test this function for 30 days before buying at the Auerswald Upgrade-Center. Alternatively, you can decide to buy the version COMfortel 2500 AB which already provides the SD card and the answering machine function COMfortel Voicemail.

COMfortel® 2500

● Technical data ***Power supply:*** PBX system's internal S_0 or U_{P0} port, max 2 W, ***System connection:*** PBX system's internal S_0 or U_{P0} port, ***PC/data port:*** USB, ***Displays:*** illuminated 128 x 64 pixel LCD, 18 LEDs (some multicolour), ***Controls:*** Keypad with vanity code, 11 function keys, 8 soft keys, 15 programmable function keys (2 levels), ***Handset:*** Electret microphone, dynamic speaker, hearing aid-compatible, ***Speakerphone:*** 8 Ω, Ø 66 mm, ***Hook switch:*** magnetic, ***Case:*** plastic; black, dark blue, or light grey (white), ***Dimensions:*** 261 mm x 109 mm x 216 mm, ***Weight:*** approx. 1120 g

COMfortel® 2500 AB

● Technical data like COMfortel 2500, but with SD card (1 GB) and activated voicemail function

COMfortel® Xtension30

● Technical data ***Power supply:*** via COMfortel 2500 (AC adapter required), VoIP 250 or VoIP 2500, ***Displays:*** 30 LEDs (multicolour), ***Controls:*** 30 programmable function keys (2 levels), ***Case:*** plastic; black, dark blue, or light grey (white), ***Dimensions:*** 146 mm x 55 mm x 216 mm, ***Weight:*** approx. 410 g

COMfortel® XT-PS

(required for the first COMfortel® Xtension30 connected to COMfortel 2500)

● Technical data ***Operation voltage:*** 230 V +/- 10 %, 50 Hz, ***Output voltage:*** 24 V DC nom., ***Power consumption:*** max. 11 W, ***Connection cable:*** approx. 3 m RJ-45 connector (8 pin), ***Case:*** plastic; black, ***Dimensions:*** 55 mm x 76 mm x 42 mm, ***Weight:*** approx. 340 g

COMfortel®

With your ISDN telephone, you've become used to some luxuries that you wouldn't want to miss after switching to a VoIP line. You'll be looking for a VoIP phone that offers you a wide range of functionalities, top quality "made in Germany", state-of-the-art design, and many technical highlights. Look no further – here's the Auerswald COMfortel VoIP 250, a stand-alone phone that you can hook up to your network, no PBX system required.

COMfortel® VoIP 250

The telephone's large backlit graphic display and the softkeys make it extremely easy to operate right from the start. You can use the 15 programmable function keys with multicolour LEDs for a number of tasks: Programme them as abbreviated-dialling keys, and you can make calls at the touch of a key. The keys can also give you quick access to useful functions such as Call Forwarding (unconditional, on busy, no reply) or call waiting.

If required, up to three COMfortel Xtension30 keypad extensions can be added, with 30 keys and LEDs each.

And here is a little bonus for frequent callers: COMfortel VoIP 250 lets you connect a wireless headset (DHSG).

Those who have the convenience of a self-powered LAN can do without an additional power supply thanks to "Power over Ethernet" (PoE). And if the network port is already occupied by your PC, simply route the PC's network connection through the COMfortel VoIP 250, with its two Ethernet ports.

- SIP-compliant as per RFC 3261
- 10 SIP accounts, 4 active simultaneously (trunk lines)
- Security: SIPS and SRTP as per RFC 4568
- VoIP codecs: G.711, G.726, G.729, G.723.1, GSM 6.10 (full rate)
- Excellent sound quality like ISDN with Echo Cancellation and comfort noise generation (CNG)
- Classification of voice packets (DiffServ)
- Redial, last caller, and call lists with up to 30 entries each
- Phone book for up to 200 entries and SIP account allocation
- Spam/spit protection, unknown/anonymous caller blocking (based on phone book entries)

Because the capabilities of internet telephony are evolving rapidly, the COMfortel VoIP 250 comes equipped with an operating system that is already prepared for new features and ideas (OpenWRT).

COMfortel VoIP 250

● Technical data ***Power supply:*** External power supply with Euro plug 230 V +/- 10%, 50 Hz, max. 7W or Power over Ethernet (PoE compliant with IEEE 802.3af), ***System connection:*** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***PC/Data port:*** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***Displays:*** white illuminated 128 x 64 pixel LCD, 18 LEDs (some multicolour), ***Controls:*** keypad with vanity code, 11 function keys, 8 soft keys, 15 programmable function keys (2 levels), ***Handset:*** Electret microphone, dynamic speaker, hearing aid-compatible, ***Speakerphone:*** 8 Ω, 66 mm Ø, ***Hook switch:*** magnetic, ***Case:*** plastic; black, dark blue, or light grey (white), ***Dimensions:*** 261 mm x 109 mm x 216 mm, ***Weight:*** approx. 1200 g (telephone), approx. 550 g (power supply)

+ + + Product Preview + + + Product Preview + + + Product Preview + + + Product Preview + + +

Just imagine: your new system telephones simply connect up to your computer network and your building needs no separate telephone wires. Or your regional representative at the other end of the country is an internal(!) subscriber in your telephone system at the company headquarters and his availability status – whether he is making a call, is receiving a call or has activated Call Forwarding – is indicated on the LED displays of other system telephones. He can call from his office via the headquarters system and use all its cost-saving functions while his telephone number as indicated to his business partners is that of the headquarters.

Just a vision of the future? Yes and no! With the same design and range of functions as the COMfortel 2500 for ISDN, our new IP system telephone is the right choice for all those who want to invest in new technology for the long term and always be up-to-date for future upgrades. The COMfortel VoIP 2500 and Auerswald's LAN-enabled telephone systems provide the harmonious basis for you to benefit from IP telephony.

Today it is already more than just a telephone: all you need is an USB memory stick, and the COMfortel VoIP 2500 provides you with a professional answering machine. It takes messages in your absence, records conversations or greets your callers with different messages depending on the time of day or caller number.

Available from Q4/2008

COMfortel® VoIP 2500

Perfect
Migration

- Access to the system telephone directory
- Additionally 800 entries locally, 4 numbers plus text info per record possible
- Power supply with external power supply unit (included) or PoE (Power over Ethernet)
- VoIP codecs: G.711 and iLBC for speech data compression
- Integration of external subscribers (subsidiaries, home offices)
- Programming via web interface
- Headset jack with DHSG support for wireless headsets
- Easy-to-operate answering machine COMfortel Voicemail (upgradeable)

You need a standard USB memory stick to record your announcements and messages on the integrated answering machine. Why not test this function for 30 days before deciding to buy, at the Auerswald Upgrade-Center.

COMfortel VoIP 2500

● Technical data ***Power supply:*** External power supply with Euro plug 230 V +/- 10% or Power over Ethernet (PoE compliant with IEEE 802.3af), ***System connection:*** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***PC/Data port:*** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), ***Displays:*** white illuminated 128 x 64 pixel LCD, 18 LEDs (some multicolour), ***Controls:*** keypad with vanity code, 11 function keys, 8 soft keys, 15 programmable function keys (2 levels), ***Handset:*** Electret microphone, dynamic speaker, hearing aid-compatible, ***Speakerphone:*** 8 Ω, 66 mm Ø, ***Hook switch:*** magnetic, ***Case:*** plastic; black, dark blue, or light grey (white), ***Dimensions:*** 261 mm x 109 mm x 216 mm, ***Weight:*** approx. 1200 g (telephone), approx. 550 g (power supply)

Making phone calls with excellent sound quality wherever you are and control the Auerswald system cordless – that's only possible with the system telephone COMfortel DECT 900.*

COMfortel® DECT 900

With this outstanding DECT system you can switch over simply with the handset (COMfortel DECT 900 Handset) system configurations, open the door or activate a Call Forwarding – easily done with the mobile handset. Call transfer, conference or reject – you simply control everything with softkeys.

* usable with COMpact 2206 USB, 4410 USB, 5010 VoIP, 5020 VoIP and COMmander Basic, Basic.2, Business

- Backlit graphic display
- 140 entries in the telephone's local phone book, can be synchronised with the PBX system's central telephone directory
- Call identification (external/internal), 10 polyphonic and 5 standard ring tones
- Up to 147 hours of standby operation with the handset
- Headset jack
- Hands-free operation with mobile handset

Total mobility
and ease of use

COMfortel DECT 900 Base and COMfortel DECT 900 Handset are available separately as well.

COMfortel® DECT 900 Base

Simply connect the base station COMfortel DECT 900 Base to a free internal S_0 port on your PBX system. This will also provide the power supply, so there's no need for an extra 230 V adapter.

- Login of max. 5 COMfortel DECT 900 Handsets (suggested: 3 handsets)
- Easy to mount on wall or ceiling
- Login of the handsets via the configuration software of the PBX

COMfortel® DECT Repeater.2
COMfortel® DECT Antenna

Get even more freedom: up to six repeaters provide an easy range maximisation due to the automatic handover of the call. With a COMfortel DECT Antenna connected to the repeater, even separate buildings can be wirelessly connected to the COMfortel DECT system, bridging distances of up to 1000 metres.

COMfortel® DECT 900

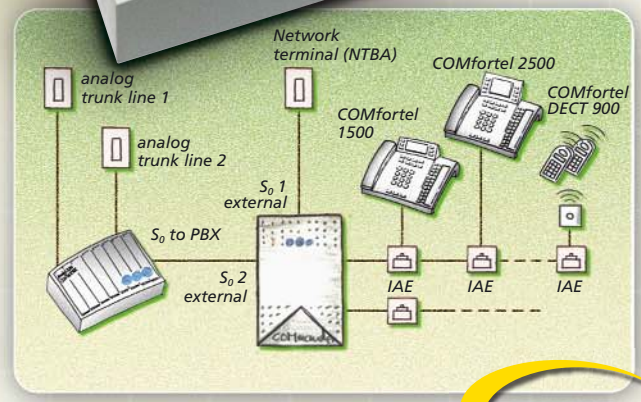
- **Technical data system** ***Transmission protocol:*** DECT/GAP, ***Transmission channels:*** up to 2 concurrent speech channels, ***Range:*** up to 300 m outdoors, up to 50 m indoors, when using COMfortel DECT Antenna, up to 1000 m outdoors
- **Technical COMfortel DECT 900 Base** ***Power supply:*** PBX system's internal S_0 port, max 1 W, ***System connection:*** PBX system's internal S_0 port, ***Case:*** plastic, black, ***Dimensions:*** 126 mm x 133 mm x 42 mm, ***Weight:*** approx. 205 g
- **Technical data COMfortel DECT 900 Handset** ***Operation time:*** up to 147 hours standby time, up to 17 hours talk time, ***Battery charging time:*** 13 hours max., ***Display:*** illuminated 102 x 65 pixel LCD, ***Case:*** plastic, black/silver, ***Dimensions:*** 50 mm x 153 mm x 29 mm, ***Weight mobile unit:*** approx. 150 g, incl. batteries, ***Weight charger:*** approx. 75 g, ***Weight power supply:*** approx. 209 g

COMfortel® DECT Repeater.2

- **Technical data** ***Power supply:*** AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 5.8 W, ***Directional aerial socket:*** SMB male, ***Cascading:*** with separate software package (Windows operating system), ***Case:*** plastic, black, ***Dimensions:*** 120 mm x 130 mm x 31 mm, ***Weight:*** approx. 135 g

COMfortel® DECT Antenna

- **Technical data** ***Directional aerial socket:*** with RF cable (included), SMB female, ***Case:*** plastic, grey, ***Dimensions:*** 101.5 mm x 95 mm x 31.5 mm, ***Weight:*** approx. 100 g



Convenience
for analog trunk lines

EXCLUSIVE by AUERSWALD

Analog/ISDN Converter

Auerswald's Analog/ISDN Converter is a unique product that provides a quick and easy solution for operating an ISDN PBX system on an analog line. The Converter is perfect for use with any Auerswald ISDN system, but you can easily use it with other manufacturers' systems. It supports all major functions of an analog line and converts them to ISDN services, which are available with the ISDN telephone system connected. Another benefit: All services your ISDN PBX system provides, such as a central Waiting Field or the automatic switchboard, are still available!

- Suitable for mixed connections (analog and ISDN)
- Number and name display (CLIP and CNIP) including date and time
- Call Forwarding (busy / no reply / unconditional)
- Call Transfer (HOLD)
- Conference Calls (3PTY)
- Automatic Callback (CCBS)

Voicemail Center 461.2

Auerswald's Voicemail Center 461.2 is the ideal complement for many of the current Auerswald PBX systems. When used together with corded COMfortel system telephones, it has even more professional functions to offer. A flashing LED on the telephone signals incoming messages (ICMs), and you can operate the mailboxes from the phone at the touch of a function key. Voicemail Center 461.2 even calls you or sends you an SMS message whenever there's a new ICM waiting for you. It even shows you the caller's number and name if this information is available in the system's phone book.

- 4 private mailboxes / 1 global mailbox
- 60 minutes recording capacity, 10 announcements
- Display: caller's number or name (CLIP/CNIP)
- Audio input and output for recording or archiving
- Perfect system integration with Auerswald's PBX systems of the COMpact range and COMmander range

Whether you retrieve ICMs from a telephone or even from a remote site – the user-friendly menu makes Voicemail Center 461.2 really easy to operate!

Analog/ISDN Converter

● **Configuration** ***Trunk line ports:*** 2 analog ports, ***Extension port:*** 1 S_0 port, ***PC port:*** USB, ***Miscellaneous:*** S_0 synchronisation port

● **Technical data** ***Power supply:*** AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 9 W, ***Trunk line port:*** analog trunk line, tone-dialling (DTMF), ***ISDN extension ports:*** S_0 port, Euro ISDN (DSS-1), point-to-multipoint connection (PTMP), ***Synchronisation port:*** S_0 port (loop-thru) PTMP or PTP, ***PC/data port:*** USB (Full Speed, V1.1 compatible with V2.0), ***Housing:*** plastic chassis with cover, ***Dimensions:*** 217 mm x 157 mm x 65 mm, ***Weight:*** unit approx. 580 g, AC adapter approx. 400 g

Voicemail Center 461.2

● **Technical data** ***Power supply:*** AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, 2.5 W max., ***System connection:*** analog port of the PBX system, ***Audio ports:*** 1 line-out jack (150 mV / 10 kΩ), 1 line-in jack (150 mV / 47 kΩ), ***Announcements:*** 6 global, 4 private, 3 sec. to 60 min., ***Recordings:*** up to 199 ICMs, digital (PCM 64/128 KBit/s), up to 60 min. (incl. OGMs), ***Display:*** illuminated 64 x 128 pixel LCD, ***Case:*** plastic, dark blue/silver, ***Dimensions:*** 220 mm x 190 mm x 50 mm, ***Weight:*** approx. 540 g (desktop unit), approx. 270 g (AC adapter)

… 101/201

… 102/202

… 103/203

TFS-Dialog 104/204

A friendly **welcome**

- State-of-the-art slim-line case, only 16 mm high
- 1–4 doorbell buttons (depending on the model)
- Outstanding speech quality, frequency-optimised amplifier electronics
- Break proof name plates, white LED background illumination
- Optional roof for weather protection and to cover existing openings or flush-mounting boxes of older Auerswald door phone systems (two variants with different height)

TFS-Dialog Product Family

The TFS-Dialog 100 and TFS-Dialog 200 door phone systems let you talk to visitors via your PBX system's FTZ or analog interface. The flat housing fits everywhere, even without mounting fixture or flush-mount socket. It does not matter whether it will be mounted directly onto a wall or a door.

TFS-Dialog 100

(FTZ models 101, 102, 103, 104)

For telephone systems with FTZ door phone port the models TFS-Dialog 101 to 104 are the ideal solution.

- For operation on a TFE port (compliant with FTZ 123 D 12-0) of a PBX system by Auerswald or another manufacturer
- Doorbell button can be used to operate light

TFS-Dialog 200

(analog models 201, 202, 203, 204)

If your PBX system has no TFE port, choose the TFS-Dialog 200. It is connected directly to one of your system's analog ports using a 2-wire cable, and it works almost like a telephone: at a push of the doorbell button, a number (internal/external) is automatically dialled.

- Operation on an analog extension of your PBX system made by Auerswald or another manufacturer
- Telephone numbers and basic functions can be programmed via the telephone
- Nameplate lighting requires no extra power supply
- Two levels of sensitivity for noisy and quiet environments
- Switch for door opener, doorbell or light (requires doorbell transformer)

TFS-Dialog product family

● Technical data ***Speaker:*** 50 mm, ***Case:*** anodised aluminium profile, ***Dimensions (L x H x W):*** 104 mm x 153 mm x 16 mm, ***Weight:*** approx. 360 g

TFS-Dialog 100

● Technical data ***Power supply:*** PBX system's door port, 12–24 V DC or 11–18 V AC, typically 75 mA, incl. lighting, ***Door port:*** compliant with FTZ 123 D12-0, ***Max. load doorbell button:*** 30 V, 1 A

TFS-Dialog 200

● Technical data ***Power supply:*** analog extension port, ***Dial mode:*** tone dialling, ***Operating voltage from analog port:*** 16–60 V DC (lighting powered via doorbell transformer) or 19–60 V DC (lighting powered via analog port), ***Operating voltage from doorbell transformer (optional):*** 8–18 V AC, 40 mA, ***Loop current, dependent on operating mode:*** <1 mA / 20–60 mA, ***Max. contact load door opener:*** 18 VAC / 40 V DC, 2 A, ***Contact load door port and stairway lighting:*** 18 V AC / 40 V DC, 0.5 A

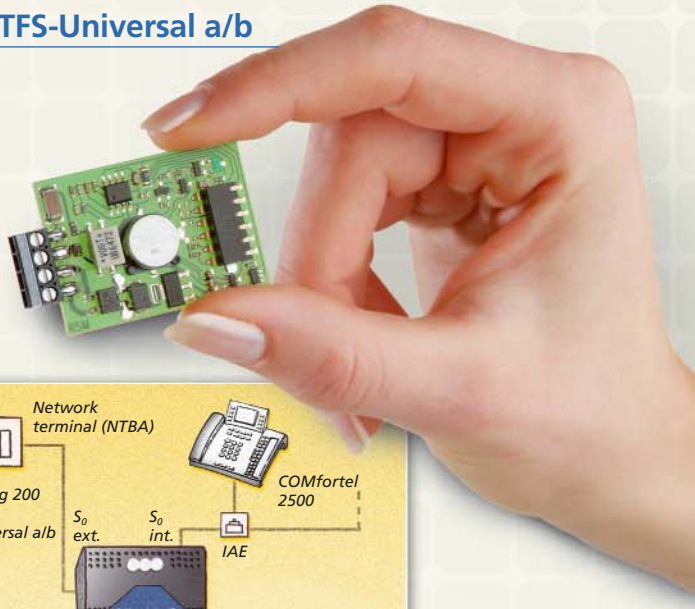
TFS-Universal a/b

Do you want to use state-of-the-art technology in your existing door phone system? The TFS-Universal a/b is our flexible variant for exactly this purpose. You can fit it almost anywhere – inside your letterbox or using the flush-mounting box of your old system. Like all our door phone systems, the TFS-Universal a/b also connects to one of the analog ports of your PBX system using a two-wire cable.

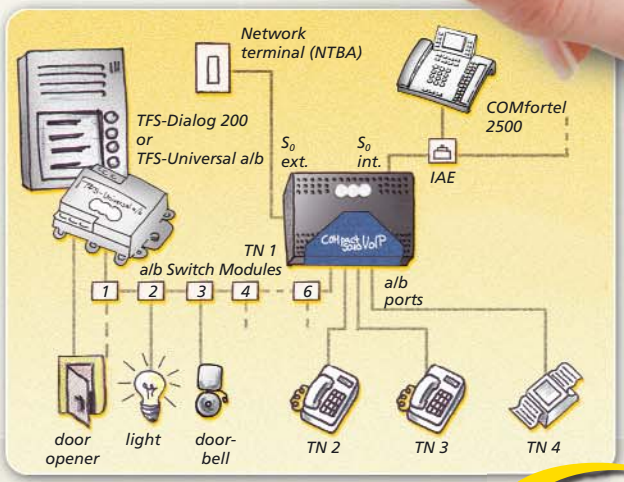
- Simple mounting with a large adhesive pad and mounting holes
- Easy programming of functions via telephone
- Two levels of sensitivity for noisy and quiet environments
- Switch contacts for door opener, doorbell or light (requires doorbell transformer)
- Connection clamps for 1–4 doorbell buttons, also usable as light buttons
- Outstanding speech quality, frequency-optimised amplifier electronics

a/b Switch Module for TFS-Dialog 200 / TFS-Universal a/b

Whenever you want to start several actions with one touch of the doorbell button, you need a switch module, which will let you ring the bell and turn on the light at the same time.



Auerswald's a/b Switch Modules are an exclusive solution, which can be connected anywhere on the signal line between door phone and PBX system, allowing you to ring an existing doorbell or to switch on the stairway light. And they offer additional safety as using these modules the relay for the door opener is positioned securely in the house instead of being outside on the wall. Mounting is very easy as they fit into existing flush-mount junction boxes.



- Up to six a/b Switch Modules per door phone system can be used with only one 2-wire cable
- Each button can be assigned to and control one or several switch modules

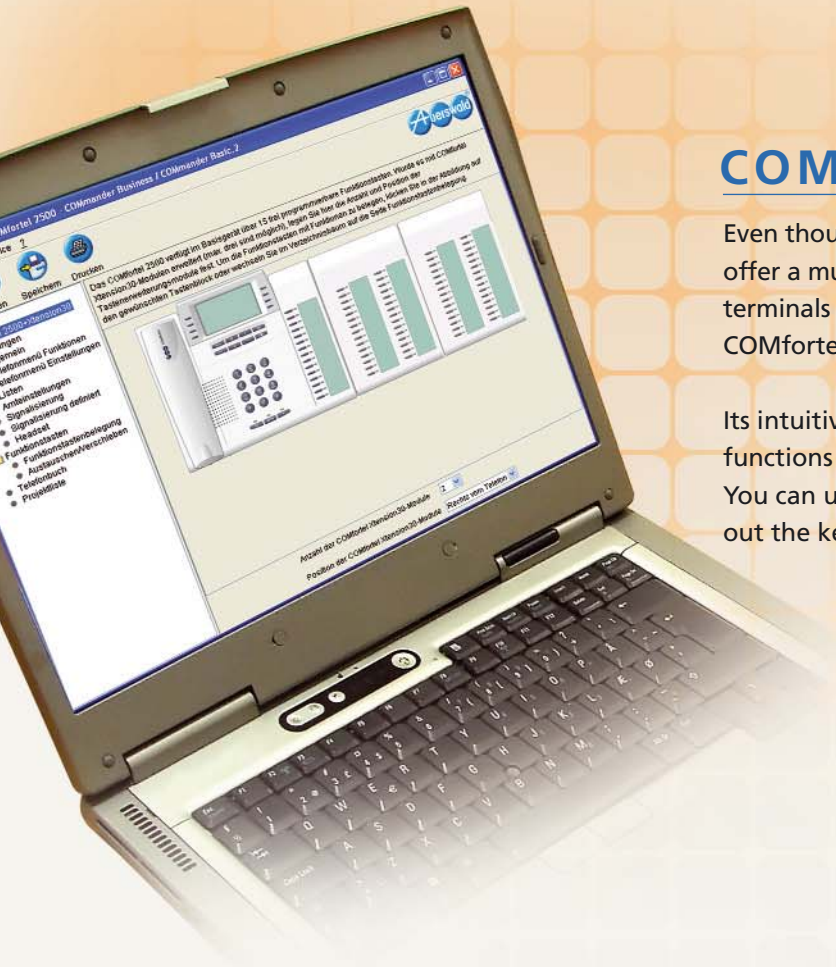
TFS-Universal a/b

● Technical data ***Power supply connection:*** internal analog extension, ***Dial mode:*** tone dialling, ***Operating voltage from analog port:*** 16–60 V DC , ***Operating voltage from doorbell transformer (optional):*** 8–18 V AC, ***Loop current, dependent on operating mode:*** <1 mA / 20–60 mA, ***Max. contact load door opener:*** 18 V AC / 40 V DC, 2 A, ***Contact load door port and stairway lighting:*** 18 V AC / 40 V DC, 0.5 A, ***Dimensions:*** 108 mm x 80 mm x 29 mm, ***Weight:*** approx. 80 g

a/b Switch Module

● Technical data ***Power supply:*** 8–18 V AC, via doorbell transformer, ***Contact load:*** 1 A, ***Switching frequencies:*** 6 channels in the range of 20–50 kHz, 100 mV, ***Range:*** 200 m, ***Dimensions:*** 45 mm x 35 mm x 10 mm, ***Weight:*** approx. 30 g

EXCLUSIVE by AUERSWALD



COMfortel® Set

Even though the system telephones of the COMfortel range offer a multitude of functions, configuration of the corded terminals is beautifully simple with the clearly structured COMfortel Set application.

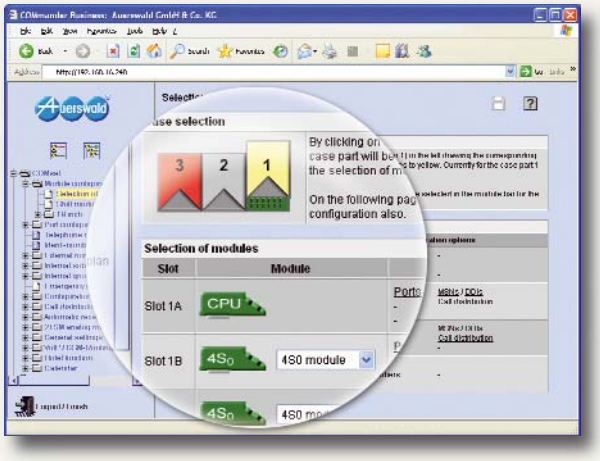
Its intuitive and easy-to-use interface lets you quickly assign functions to a key, or configure it as a busy indicator light. You can use the internal print function, for instance, to print out the key label strips.

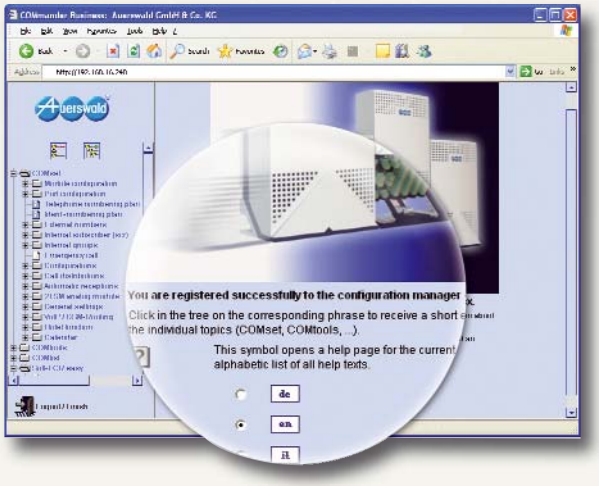
Or you could create your own ring tones for incoming calls and upload them to the telephone, using the COMfortel Melody add-on.

Configuring **system telephones**

COMset

Our COMset software lets you make the most of the functions your Auerswald system has to offer. Whether you're using our smaller COMpact 2104.2 USB or the larger COMpact 2206 USB / 4410 USB, the COMset application helps you quickly configure the features you want.



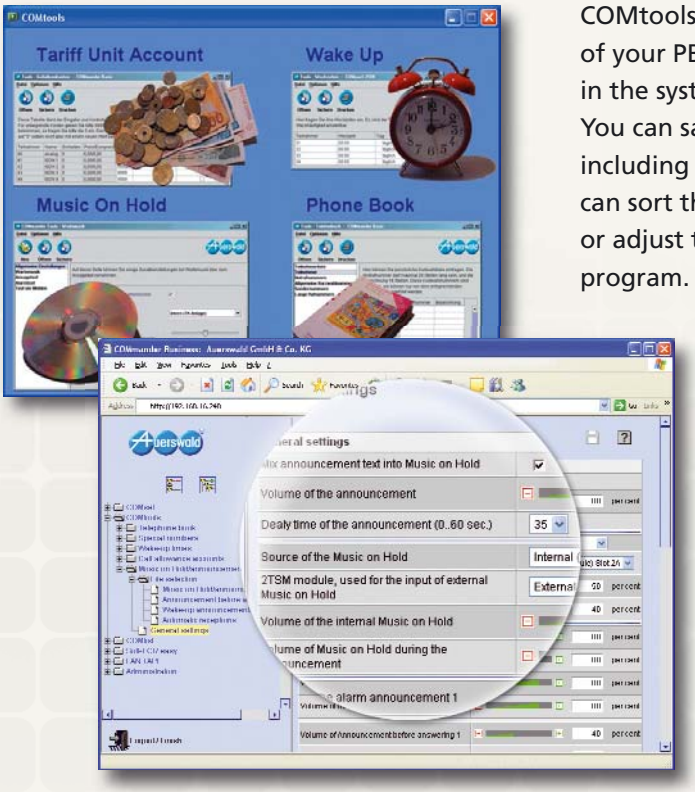

You are registered successfully to the configuration manager
Click in the tree on the corresponding phrase to receive a short
the individual topics (COMset, COMtools, ..).
This symbol opens a help page for the current
alphabetic list of all help texts.
de
en
it

In a first step, you specify your system's current configuration. You will then be offered all the features available for this hardware configuration. Since all settings are clearly organised in a folder structure, you only have to go through them step by step, so there's no danger of missing any setting. You can transfer this configuration to your PBX system via the USB port, the internal S_0 bus, or even from a remote location. A password prevents any unauthorised access.

If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmander Basic.2 or COMmander Business system, you only need a PC with web browser to configure it. Simply call up the appropriate page on your browser. Access is possible from any computer within the network. The web interface makes it easy to install firmware updates and add-ons.

Full feature control

COMtools


COMtools
Tariff Unit Account
Wake Up
Music On Hold
Phone Book
Volume of the announcement
Dealy time of the announcement (0..60 sec.)
35
Source of the Music on Hold
Internal
2TSM module, used for the input of external Music on Hold
Volume of the internal Music on Hold

COMtools is a collection of handy software tools for everyday use of your PBX system. They make it even easier to update the entries in the system's telephone directory, or enter new wake-up times. You can save telephone numbers and names in the phone book, including their respective released and restricted numbers, and you can sort the numbers by name if you want. To record a new tune or adjust the volume, simply use the COMtools Music on Hold program.

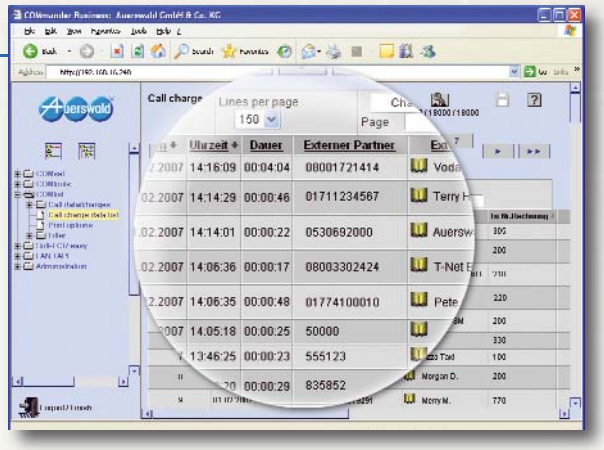
If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmander Basic.2 or COMmander Business system, you can access the COMtools via a web interface. This allows all authorised subscribers in the PC network to update the system's telephone directory, record new announcements, or recharge their prepaid account.

Simplify everyday tasks

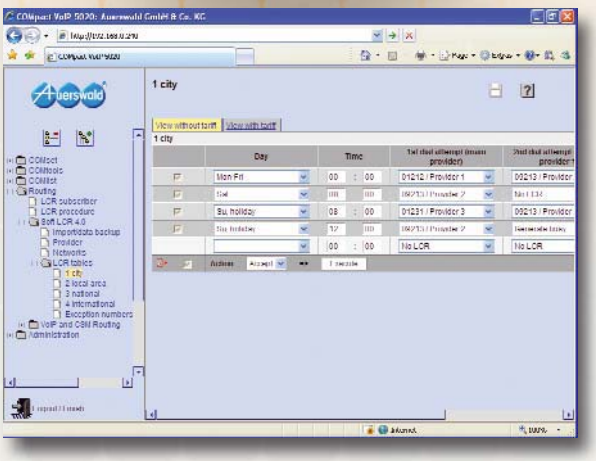
COMlist

All Auerswald PBX systems store the data of every external call. To get the most out of this feature, Auerswald's current ISDN PBX systems include the COMlist software. This is an intuitive and easy-to-use application for managing your call records and statistics. Call records may include number dialled, caller's number, extension, date, time, and length of call. These data are initially stored in the system, where they are protected from network failure.

For call statistics, you can filter and save the data according to a variety of criteria. A filter wizard helps you set up filter profiles, so you can display call records for individual departments, subscribers, groups or projects with one mouse click. You can then sort the filtered data and archive them on your PC. The program also lets you print out neat and clearly structured call statistics on your PC printer.



Managing **call records**



Soft-LCR

How does it work to save money with the Least Cost Routing (LCR) of Auerswald PBX systems? It's easy: you simply dial your number and do not care about it. The PBX will do the work by automatically adding the prefix for a cost-saving connection.

Soft-LCR lets you manually enter your "low-cost" dialling codes in a table. Or in some countries you could save time and simply get a table of low-cost numbers especially for your system from a specialised provider. Within these tables it is possible to differentiate the days of the week, the time of day and even take public holidays into account. If your favourite provider is not available the PBX automatically dials an alternative (a fallback provider).

And you get even more possibilities with the systems COMpact 5010 VoIP / 5020 VoIP and COMmander Basic.2 / Business. Here you can set the minute price for the first and the subsequent minutes and the clock rate. With this you can store calls charges without getting charge pulses from the network. You can even see these charge values on terminal displays or print them out in detailed call accounting lists (Hotel Function). This is very helpful if you have flat rates or using alternative providers not offering any charge information.

Auerswald LAN-TAPI

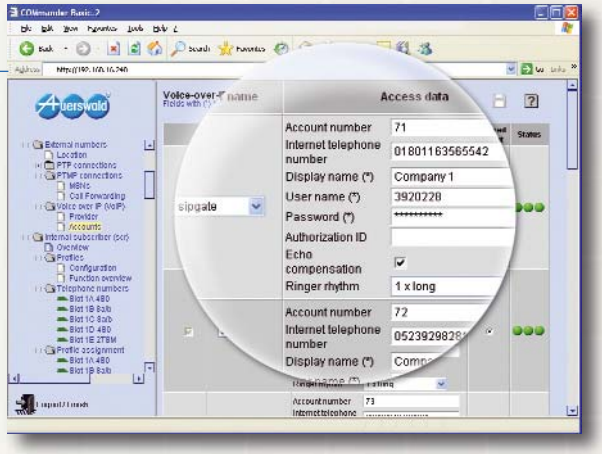
Computer **T**elephony **I**ntegration (**CTI**) is the connection of telecommunication with data processing – so between telephone and computer. In the meantime CTI solutions are used everywhere – specially in business environments. They allow to dial out of e.g. office applications automatically or to accept and finish calls.
Auerswald's newly developed LAN-TAPI provides a TAPI 2.1 network interface via the Ethernet port of the telephone system*. Any authorised dealer can activate this function via the Upgrade Center, at no extra cost for the first four users. In Microsoft Windows, a computer will allocate the functionality to individual computers within the network, making TAPI functions available to telephony software applications** (such as OSITRON CTI Server or other CTI applications).

- MSNs called (multiple company operation)
- Call Forwarding (CFU, CFB, CFNR)
- Call Deflection (diverts calls before they are answered)
- Conference (3PTY), Call Transfer with/without consultation, Pick-up
- Caller ID displayed/hidden (CLIP/CLIR)
- Connected line ID (COLP)

* COMpact 5010/5020 VoIP, COMmander Basic.2/Business

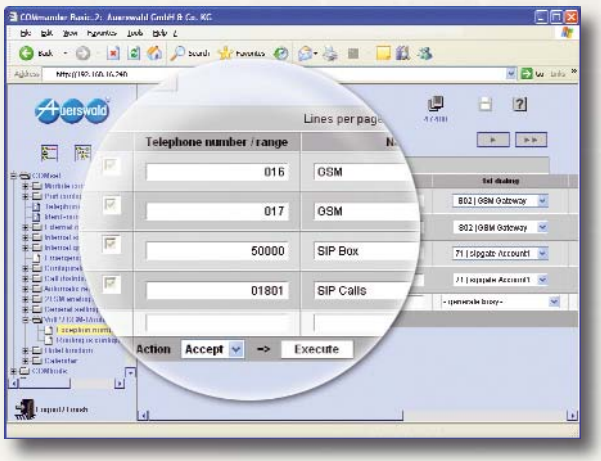
** Analog or ISDN phones of other manufacturers may not offer the complete functionality

VoIP functionality



If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmander Basic.2 or COMmander Business system, you can integrate it with your existing network via the built-in Ethernet port. This will allow you to make VoIP calls. You can quickly and easily configure all the settings you need for the VoIP functionality via the web interface, including call distribution, CLIP, or a preferred trunk line.

Just enter your provider's technical server data and the access data for each account. Then use the Call Distribution function to route VoIP calls to the correct extension. You can configure the PBX using the integrated VoIP/GSM routing so that the VoIP line is the preferred line for all outgoing trunk calls. When all available VoIP lines are in use, the system will simply use landline connections instead (fallback).



Free calls are normally only possible if both parties have VoIP. There is a charge if you call a VoIP number from a landline, or you call a landline number via your VoIP account. That's why the system lets you set a specific account or trunk line access for every number or number range used to make calls (permitted numbers). This will even let you answer intercom calls to a remote PBX system via VoIP.

Migration of IP system telephony

The PBX systems COMpact 5010 VoIP, COMpact 5020 VoIP, COMmander Basic.2 and COMmander Business allow you to migrate to IP system telephony one step at a time First you use your existing telephone infrastructure. Step by step, you switch over whole departments or new employees to VoIP. This ensures you keep your investment costs low and only "pay as you go".

The latest firmware and matching expansion modules upgrade your system with the latest IP technology. You can even carry on using existing terminals, such as analog, ISDN or system telephones. And you'll be able to operate your new IP system telephone right away: it works in exactly the same way as the system telephones you know.

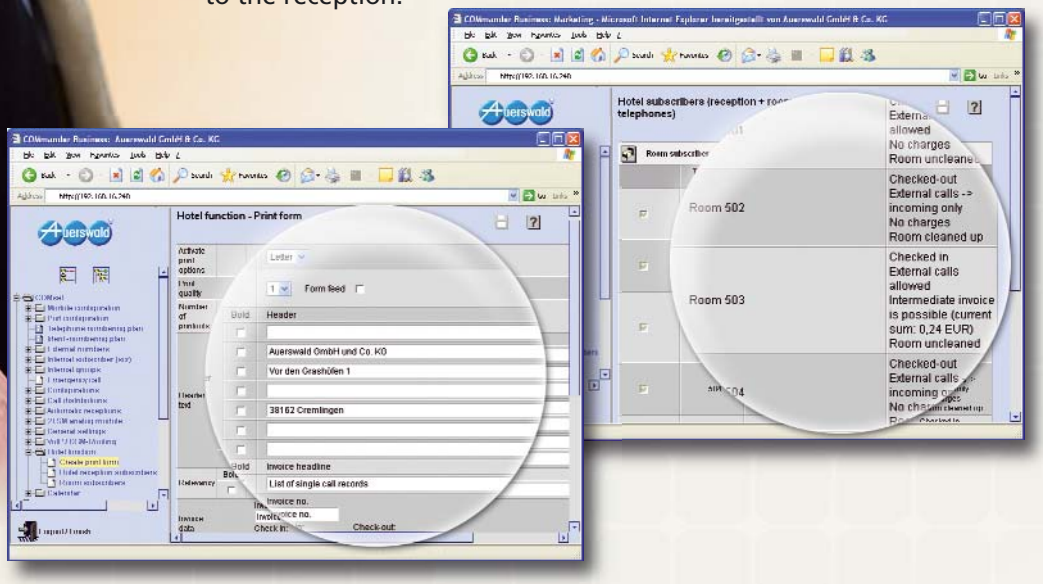
IP-based communication has an added benefit for companies working on more than one site, who can use already established VPN tunnels for VoIP.

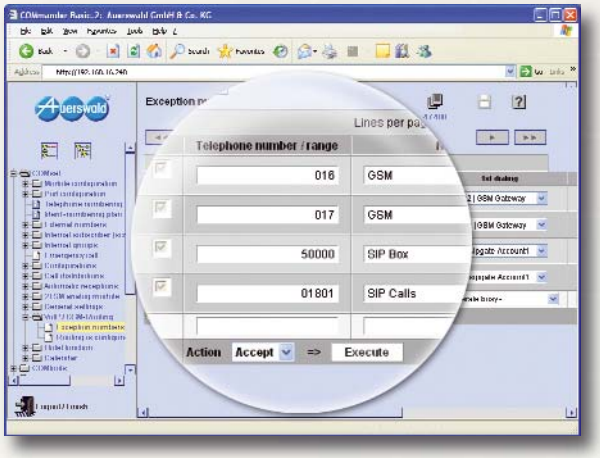
Get ready for the future – with cutting edge IP-enabled PBX systems from Auerswald. From Q4 2008 these systems will also support VoIP for internal calls.

Hotel Function

With this additional function, Auerswald provides a quick and easy way for hotels (with up to 60 rooms) to manage their guests' telephone calls. You can activate the in-room phones from a central telephone (check in). When a guest leaves, you deactivate their phone, request the charges incurred, and print out an itemised bill for the guest (check out). You can use any analog or digital telephone as an in-room phone. These telephones are configured to support only a limited number of functions. This prevents guests from accidentally using features such as Call Forwarding.

Guests can use their in-room phone to call internal, external and emergency numbers, as well as setting a time for their automatic wake-up call. From the telephone at the reception you can block all external calls from an in-room telephone, permitting only internal and emergency numbers. This still allows hotel staff to use the phone for communicating the room status (such as "cleaned") to the reception.



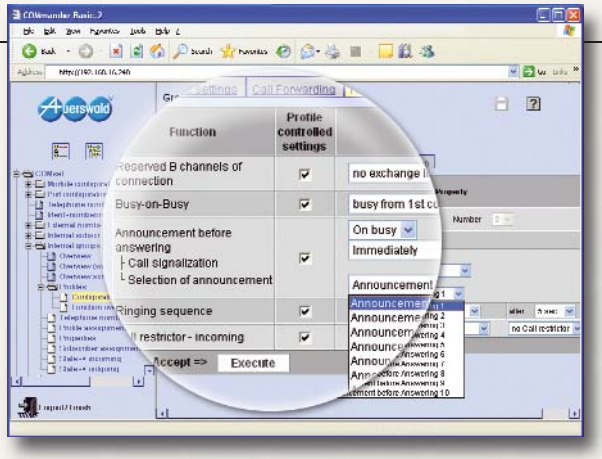


* Calls are only free if both subscribers use the same VoIP provider or a partner network. For details, please contact your VoIP provider.

VoIP & GSM Routing

This function opens up more ways of saving money, with internet and mobile telephony. Calls between two subscribers with the same VoIP provider or GSM network are normally cheaper or even free*.

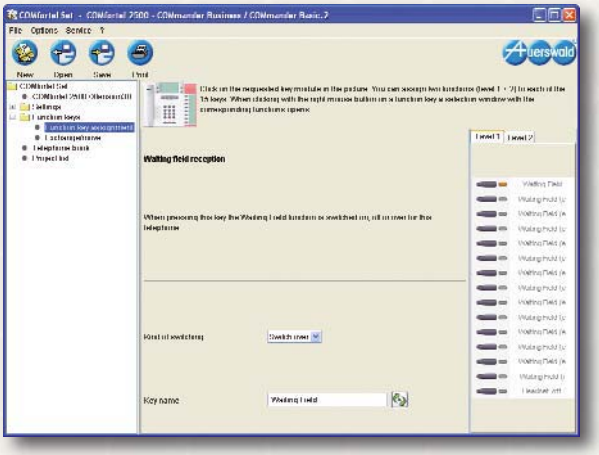
To automate this functionality simply save all VoIP or GSM numbers in a table of permitted numbers. For each table entry you can choose whether calls should be routed via VoIP or even via a connected GSM gateway. Numbers that aren't listed are automatically routed via the landline. If the numbers you have chosen are busy, you can set fallback numbers. By integrating these "gateways", you can also increase the number of external calls that can be made simultaneously.



Announcement before Answering

To make your callers feel welcome, why not use the Announcement before Answering function! All calls are automatically answered and a greeting is played – even when you are not in the office or your telephone is not manned. Depending on your system's expansion level, the greeting can be played to up to 38 callers simultaneously (COMmander Business).

You can store your own Music on Hold and announcements in WAVE file format, using either the COMtools software (COMpact 4410 USB) or the web interface (COMpact 5010/5020 VoIP and COMmander Basic.2/Business). Depending on the system used up to ten different messages are available. You can also configure this function to play an announcement if the called extension is busy.



Waiting Field

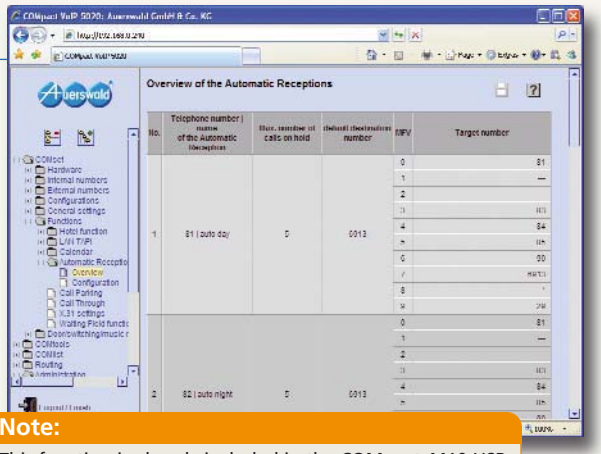
The integrated Waiting Field allows you to manage incoming calls from any number you have defined as a switchboard. Incoming calls are signalled on the COMfortel 1500/2500's function keys, so you can deal with them one by one. You can transfer individual calls to another extension, place them in a waiting loop if the extension is busy, keep them in the Central Waiting Field, or press the appropriate key to speak to the caller at any time. The size of the Waiting Field is determined by the number of trunk line channels available.

Open Query

A call comes in and you do not know where the person is the caller wants to reach? An easy task with Auerswald systems. Simply transfer the call to one of the special numbers and inform your colleague via loudspeaker which number you have used to store the call. So he dials this number at any extension and is connected to the caller. And it is even easier with an Auerswald system phone: simply push the Xtension key with the illuminated LED!

Auto Attendant

How about letting your callers decide themselves who they wish to speak to? You can define up to 10 different numbers a caller can reach with DTMF dialling. The announcements informing the callers about the options can be recorded via the telephone, or copied to the PBX system from your PC. A maximum of ten of these Auto Attendants can be applied in parallel or consecutively (cascaded) with the systems COMpact 5010/5020 VoIP and COMmander Basic.2/Business. And Auerswald systems are even smarter: not only the ten standard options (0–9) can be used but as well multi-digit dialling is possible.


Overview of the Automatic Receptions
Telephone number | name of the Automatic Receptions
Max. number of calls on hold
Internal destination number
DDV
Target number

Note:

This function is already included in the COMpact 4410 USB (1 Auto Attendant). With the COMpact 5010/5020 VoIP and COMmander Basic.2/Business systems, you will be able to activate it at a low price.

Overview
PBX systems

	COMpact					COMmander®	
	2104.2 USB	2206 USB	4410 USB	5010 VoIP	5020 VoIP	Basic.2	Business
Connection options							
Max. number of ISDN ports external (DSS-1) S_0 / S_{2M}	1 / –	1 / –	2[1] / –	1 / –	3[1] / –	8[1] / 1[1]	16[1] / 1[1]
Max. number of analog trunk lines (POTS)	–	–	–	2[1]	6[1]	–	–
Max. number of external VoIP channels / Echo Cancellation	– / –	– / –	– / –	4[1] / ●	4[1] (8[1+10]) / ●	2 (24[1+10]) / ●	2 (38[1+10]) / ●
Max. number of simultaneous trunk lines	2	2	4	8[1]	10[1] (14[1+10])	34[1]	38[1]
Connection type external ISDN ports PTP / PTMP	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
VoIP codecs[1]: G.711 / G.723.1 / G.726 / G.729 A/E / iLBC	– / – / – / – / –	– / – / – / – / –	– / – / – / – / –	● / ● / ● / ● / ●	● / ● / ● / ● / ●	● / ● / ● / ● / ●[10]	● / ● / ● / ● / ●[10]
VoIP with ext. gateway / VoIP integration / VoIP & GSM routing	● / – / ●	● / – / ●	● / – / ●	– / ● / ●	– / ● / ●	– / ● / ●	– / ● / ●
Max. number of internal ISDN ports S_0 / U_{P0}	– / –	1 / –	3[1] / –	2[1] / 2[1]	8[1] / 8[1]	24[1] / 32[1]	56[1] / 72[1]
Max. number of internal analog ports (a/b)	4	6	10	6	10	32[1]	64[1]
Max. number of intern VoIP channels	–	–	–	4[1+10]	8[1+10]	24[1+10]	64[1+10]
Connection type internal ISDN ports PTP / PTMP	– / –	– / ●	– / ●	– / ●	– / ●	– / ●	– / ●
Max. number of door phone ports / door bell interfaces / door openers / Switching relays[2] (FTZ 123 D 12-0)	– / – / – / –	1[1] / 2[1] / 1[1] / 3[1]	2[1] / 4[1] / 2[1] / 6[1]	1[1] / 2[1] / 1[1] / 3[1]	3[1] / 6[1] / 3[1] / 9[1]	2[1] / 4[1] / 2[1] / 6[1]	8[1] / 16[1] / 8[1] / 24[1]
Max. number of audio inputs (MoH) / audio outputs (announcement function)	– / –	1[1] / 1[1]	1[1] / 1[1]	1[1] / 1[1]	1[1] / 3[1]	1[1] / 1[1]	1[1] / 4[1]
Serial interface (RS232) for configuration / printer	– / –	● / ●	● / ●	– / –	– / –	– / ●	– / ●
USB port to the PC for configuration / ISDN PC adapter function	● / ●	● / ●	● / ●	– / –	– / –	● / –	● / –
USB host port for printer (call data printout)	–	–	–	–	●	–	–
Ethernet port	–	–	–	●	●	●	●
Support of system telephones corded / cordless	– / –	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Support of the Voicemail Center 461.2	●[3]	●	●	●	●	●	●
Trunk line features							
Number of DDIs/MSNs for PTP / PTMP connection	30[6] / 30[6]	100[6] / 100[6]	100[6] / 100[6]	250 / 10	250 / 60	250 / 80	250 / 160
Call Transfer (HOLD) / Conference (3PTY)	● / ●[4]	● / ●[4]	● / ●[4]	● / ●[4]	● / ●[4]	● / ●[4]	● / ●[4]
Call Forwarding (CFB, CFNR, CFU)	●	●	●	●	●	●	●
DDI Call Forwarding (CD(PR))	–	–	–	●	●	●	●
Automatical Callback to busy subscriber (CCBS) / no reply (CCNR)	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Number presentation (CLIP) on ISDN / analog terminals	– / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Customer specific number presentation (CLIP no screening)	–	–	–	●	●	●	●
Call-by-call suppression of own number (CLIR)	●	●	●	●	●	●	●
Charge information AOCD / AOCE	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
X.31 on the internal S_0 port (X.25 in the D channel)	–	●	●	●[1]	●[1]	●[1]	●[1]
Name display (CNIP using DISP/SUB)	●	●	●	●	●	●	●
Security functions							
Password protection, number of levels	4	4	4	4	4	4	4
Trunk line authorisations	6	6	6	6	6	6	6
Barred / allowed numbers (outgoing calls)	20 / 20	20 / 20	20 / 20	100 / 100	100 / 100	100 / 100	100 / 100
VIP / Robinson numbers (incoming calls)	20 / 10	20 / 10	20 / 10	100 / 100	100 / 100	100 / 100	100 / 100
Prioritised emergency numbers	●	●	●	●	●	●	●
Off-hook emergency dialling (e.g. baby call)	●	●	●	●	●	●	●
Room monitoring internal / external	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Alarm functions	–	●[1]	●[1]	●[1]	●[1]	●[1]	●[1]
Call data management (via PC software)							
Call logging, number of records	3.000	3.000	3.000	2.000–6.000[1]	2.000–6.000[1]	3.000–9.000[1]	6.000–18.000[1]
Separation of private and business calls	●	●	●	●	●	●	●
Call charges per trunk line / extension	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Project assignment of calls	–	●	●	●[1]	●[1]	●[1]	●[1]
Charge accounting per extension	●	●	●	●	●	●	●
Generation of charge pulses for analog ports	–	●	●	●	●	●	●
Phone book / Short dial memory							
Telephone directory central / per extension / with names	400 / 20 / ●	400 / 20 / ●	400 / 20 / ●	400 / – / ●	400 / – / ●	400 / – / ●	400 / – / ●
Name display on CNIP compatible terminals	●	●	●	●	●	●	●
Directory for emergency numbers with special rights	10	10	10	10	10	10	10
Short dial authorisation as extended exchange line authorisations	●	●	●	●	●	●	●
Additional system features							
Call Waiting / Busy-on-Busy	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Flexible numbering plan	●[8]	●[8]	●[8]	●[9]	●[9]	●[9]	●[9]
Waiting Field switchboards / external calls	– / –	– / –	1 / 4	– / –	20 / 14[10]	20 / 34	40 / 38
Open query	●	●	●	●	●	●	●
Auto Attendant (cascadeable)	–	–	1	10	10	10	10
Hotel Function (check-in/check-out)	–	–	●	–	●[1]	●[1]	●[1]
Max. number of groups with MSN/DDI allocation	4	16	16	32	32	64	64
Group calls all / linear / incremental / rotating	● / – / – / –	● / – / – / –	● / – / – / –	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●
Announcement before Answering	–	–	1	10[1]	10[1]	10[1]	10[1]
Automatic fax/modem switch	–	–	–	●[1]	●[1]	–	–
Do-not-disturb internal / external	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Line reservation	●	●	●	●	●	●	●
Direct line access / internal functions still possible	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Call pick-up (e.g. from answering machine)	●	●	●	●	●	●	●
Call Diversion internal / Follow me	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Boss/Secretary function	–	●	●	●	●	●	●
Call Forwarding, Call Transfer, Conference possible via 2nd B channel	●	●	●	●	●	●	●
Ring patterns to distinguish callers (using MSN/DDI, external)	8	8	8	8	8	8	8
Automatic Callback to busy subscriber, internal	●	●	●	●	●	●	●
Door terminal to exchange line calls (pharmacy function) internal / external	– / –	●[1] / ●[1]	●[1] / ●[1]	●[1] / ●[1]	●[1] / ●[1]	●[1] / ●[1]	●[1] / ●[1]
Manual / automatic switching of configurations (e.g. day/night)	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Max. number of configurations (profiles)	6	6	6	8	8	8	10[1]
Music on Hold, number of internal melodies	7	7	●[7]	●[7]	●[7]	●[7]	●[7]
Support for UMS (via CAPI) / CTI (via TAPI)	● / ●	● / ●[5]	● / ●[5]	● / ●[5]	● / ●[5]	● / ●[5]	● / ●[5]
CTI (via LAN-TAPI)	–	–	–	●[1]	●[1]	●[1]	●[1]
Call Through (internal and external)	●	●	●	●[1]	●[1]	●[1]	●[1]
Least Cost Routing Soft LCR: max. number of providers	31	31	31	50[1]	50[1]	50[1]	50[1]
Support for landline SMS / separate call distribution for SMS	● / ●	● / ●	● / ●	●[10] / ●[10]	●[10] / ●[10]	●[10] / ●[10]	●[10] / ●[10]
Installation and maintenance							
Automatic detection of the dial mode at the analog extensions	●	●	●	●	●	●	●
Learning function for FLASH time detection at the analog extensions	●	●	●	●	●	●	●
Firmware update: PC / programming codes / key stroke / automatic	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●	● / – / – / ●	● / – / – / ●	● / – / – / ●	● / – / – / –
Least Cost Routing setup and update via PC software	●	●	●	●	●	●	●
Remote readout and programming via public network / via ISDN PC card	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Configuration via PC (V.24) / PC (USB) / ISDN PC card / Ethernet	– / ● / ● / –	● / ● / ● / –	● / ● / ● / –	– / – / ● / ●	– / – / ● / ●	– / ● / ● / ●	– / ● / ● / ●

Overview Telephones

	COMfort		COMfortel®				
	200	300	VoIP 250	1500	2500 (...AB)	VoIP 2500	DECT 900
Connections/extensions							
System connection	analog port	analog port	Ethernet 10/100 Base-T	internal S_0/U_{P0} port	internal S_0/U_{P0} port	Ethernet 10/100 Base-T	internal S_0-Port
USB interface for programming / TAPI / Internet	– / – / –	– / – / –	– / – / –	– / – / –	● / ● / ●	– / – / –	– / – / –
USB host port for future extensions (e.g. answering machine)	–	–	–	–	–	●	–
Key extension modules (Xtension30)	–	–	max. 3[11]	–	max. 3[11]	max. 3[11]	–
Headset connection / Cordless headsets (DHSG)	– / –	● / –	● / ●	instead of handset / –	● / ●	● / ●	● / –
Update of the firmware via menu / PC directly / interface of the PBX	– / – / –	– / – / –	● / ● / –	● / – / ●	● / ● / ●	● / ● / ●	– / – / –
Automatic update / copy function	– / –	– / –	● / –	● / ●	● / ●	● / ●	– / –
External feeding / feeding via system connection	– / ●	● / –	● / ● (PoE)	– / ●	●[11] / ●	● / ● (PoE)	– / ●
Voicemail optional / integrated	– / –	– / –	– / –	– / –	● / – (– / ●)	● / –	– / –
Display							
Type	–	alphanumerical	graphical	graphical	graphical	graphical	graphical
Size	–	3 lines	128x64 pixel	128x32 pixel	128x64 pixel	128x64 pixel	102x65 pixel
Colours	–	monochrome	monochrome	monochrome	monochrome	monochrome	monochrome
Illuminated	–	●	●	–	●	●	●
Menu languages	–	D GB F DK NL E PL S FIN N GR CZ SK TR	D GB	D GB F DK NL E GR I S CZ	D GB F DK NL E GR I S CZ	D GB F DK NL E GR I S CZ	D GB F I
Special VoIP functions							
VoIP codecs: G.711 / G.723.1 / G.726 / G.729 A/B /	– / – / – / – /	– / – / – / – /	● / ● / ● / ● /	– / – / – / – /	– / – / – / – /	● / – / – / – /	– / – / – / – /
GSM 6.10 (full rate) / iLBC	– / –	– / –	● / –	– / –	– / –	– / ●	– / –
Comfort Noise Generation (CNG) / Echo Cancellation	– / –	– / –	● / ●	– / –	– / –	● / ●	– / –
SIPS / SRTP	– / –	– / –	● / ●	– / –	– / –	● / ●	– / –
DHCP / static IP address	– / –	– / –	● / ●	– / –	– / –	● / ●	– / –
Time retrieval (NTP server)	–	–	●	–	–	●	–
Special DECT functions							
Max. numbers of handsets COMfortel DECT	–	–	–	–	–	–	5 (recommended 3)
Max. number simultaneous connections	–	–	–	–	–	–	2
Max. number of COMfortel DECT Repeater.2	–	–	–	–	–	–	6
Automatic handover within the DECT range	–	–	–	–	–	–	●
Max. range of base and repeater	–	–	–	–	–	–	300 meter
Key lock	–	–	–	–	–	–	●
Key tones	–	–	–	–	–	–	●
Max. talk / stand-by time of the handset	–	–	–	–	–	–	17 h / 147 h
GAP standard	–	–	–	–	–	–	●
Fixed function keys							
Cancel, disconnect	–	–	●	●	●	●	●
Hook (additional hook key)	–	–	●	●	●	●	–
Loudspeaker / hands-free	– / –	– / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Volume (+/-)	–	●	●	●	●	●	●
Microphone mute	●	●	●	●	●	●	●
Query key	●	●	●	●	●	●	●
Access to the phone directories in the phone / the PBX	– / –	● / –	● / –	● / ●	● / ●	● / ●	● / ●[12]
Phone book / max. number of records in the phone	● / 10	● / 70	● / 200	● / 400	● / 800	● / 800	● / 140[12]
Vanity compatible keypad (2ABC, 3DEF, ...)	●	●	●	●	●	●	●
Redial list / number of entries	● / 1	● / 10	● / 30	● / 30	● / 30	● / 30	● / 15
Power Dialling (automatic redialling)	–	–	–	●	●	●	●
Softkeys , programmable multifunction keys							
Number of softkeys	–	–	8	6	8	8	2
Number of multifunction keys / levels	–	3 / 1	15 / 2[11]	15 / 2	15 / 2[11]	15 / 2[11]	10 / 1
Key extensions (Xtension30) / number of multifunction keys per module	– / –	– / –	3[11] / 30	– / –	3[11] / 30	3[11] / 30	– / –
LED per multifunction key / multi-coloured	– / –	– / –	1 / ●	1 / ●	1 / ●	1 / ●	– / –
Programmable functions on the multifunction keys							
Busy lamp field (extension/line keys)	–	–	–	●	●	●	–
Speed dialling internal / external	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Call Forwarding	●[13]	●[13]	●	●	●	●	●
Do-not-disturb	●[13]	●[13]	●	●	●	●	●
Selected MSN / S_0 access	●[13] / ●[13]	●[13] / ●[13]	– / –	● / ●	● / ●	● / ●	● / ●
Selected SIP provider access	●[13]	●[13]	●	●	●	●	–
Configuration switching	●[13]	●[13]	●[13]	●	●	●	●
Login/logout for groups	●[13]	●[13]	●[13]	●	●	●	●
Terminal lock	–	–	●	●	●	●	–
Call pick-up	●[13]	●[13]	●[13]	●	●	●	●
Switching of relays	●[13]	●[13]	●[13]	●	●	●	●
Macro functions (complex sequences on a single keystroke)	–	–	–	●	●	●	–
Caller list							
Number of calls	–	61	30	30	30	30	30
Date, Time, Number	–	●	●	●	●	●	●
Name (if found during online search / if stored in the phone book)	– / –	– / ●	– / ●	● / ●	● / ●	● / ●	– / ●
Callback function / transfer into the phone book	– / –	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Group caller list (group oriented deleting of list entries)	–	–	–	●	●	●	–
Configuration							
Local configuration via menu / interface at the telephone	– / –	● / –	● / ●	● / –	● / ●	● / ●	● / –
Central configuration via PBX (V.24/USB/CAPI/Ethernet)	–	–	–	●	●	●	●
Configuration via Web interface	–	–	●	–	–	●	–
Remote configuration via ISDN / WAN	– / –	– / –	– / ●	● / ●	● / ●	– / ●	● / ●
Call signalling							
Optical with display illumination / optical signalling with LED	– / –	– / ●	● / ●	– / ●	● / ●	● / ●	● / ●
Different for internal / external / door	● / ● / ●	● / ● / ●	– / – / –	● / ● / ●	● / ● / ●	● / ● / ●	● / ● / –
Different for subscribers / groups	– / –	– / –	– / –	● / ●	● / ●	● / ●	– / –
Different for phone book entries	–	–	●	●	●	●	–
Different for VIP numbers	–	–	–	●	●	●	–
Different for appointments / wake-up / alarm	– / – / –	– / – / –	– / – / –	● / ● / ●	● / ● / ●	● / ● / ●	● / ● / –
Number of call melodies / individually changeable	3 / –	1 / –	10 / ●	8 / ●	16 / ●	16 / ●	15 / –
Name display out of the online search / out of the phone book	– / –	– / ●	– / ●	● / ●	● / ●	● / ●	● / ●

● Function available – Function not available

[1] The possible expansion level and port configurations you can find in the product specifications
[2] When using a door station, 2 switching relays are not available
[3] Operation as convenient answering machine without system functions
[4] Available as extension feature
[5] In connection with COMfortel 2500 / 2500 AB, additional UMS and CTI clients are possible
[6] 100 MSNs/DDIs available in total for all external S_0 ports
[7] Music on Hold can be downloaded to the system via PC
[8] 2 or 3 digits, or mixed, 10–59 / 100–599
[9] 2–4 digits, or mixed, 10–9999
[10] Will become available later as an update
[11] Optional 3 additional Xtension30 modules with 30 two-level function keys each; COMfortel 2500 / 2500 AB: when using one or more COMfortel Xtension30 a power supply becomes necessary
[12] COMpact 5010/5020 VoIP, COMmander Basic.2/Business: 140 entries in the phone book per handset, sync with central PBX phone book
COMpact 2206/4410 USB: 80 entries in the phone book per handset, sync with central PBX phone book
[13] Functions of the PBX are available by using activation digits

Please note: The full range of functions described here may only be available following professional installation and setup of the system and connection with a computer. We recommend you to contact an authorised dealer for information before attempting installation.
Some functions will only be available once your network provider has activated the appropriate services.
When using an Auerswald PBX system together with other manufacturers' terminals or systems, incompatibilities may occur, which may affect the use of certain features. The features listed here refer to products for the German market. Product versions for export may be different.
Subject to change without prior notice

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